

From the Editor

Tara S. Behrend

Last year, I met a student who told me that our conversation was the first he had ever had with a professor; he didn't know we were real people. "Wow, it's so interesting," he said, "that you have, like, a real personality and stuff." He was a junior. The thought that he had spent 3 years as a university student and never interacted with a professor made me incredibly sad. My own college experience was profoundly enriched by conversations with professors after class or over coffee. These conversations shaped my thinking and my career path. Upon further reflection, I realized that I was not doing my part to pay it forward. I had been spending most of my time with graduate students and other faculty, and wasn't making enough time for undergraduates. So, last month I moved into the dorm, where I have just been appointed as the new faculty-in-residence and from where I am currently writing to you.

My position here is not that of disciplinarian or administrator. I don't have to check for parties in the hallways or resolve roommate disputes. Instead, I open my home to the students and have conversations over a plate of cookies. I take them to art shows and book talks. I say hello in the hallways. I am their neighbor.

My students are really impressive. They are better feminists than I was at their age. They care more about the environment; in fact one group of 30 students is running a zero-waste experiment for the year. They cook from a shared CSA and recycle absolutely everything. They compliment me for using cloth napkins instead of paper. They are savvy about politics and world affairs. They pay attention.

Because they pay attention, they have many anxieties about the future. They want to find a job they love, and they want to make a living wage doing it. They want meaningful work. Most of them aren't thinking about anything more long-term than that; the idea of buying a house in our expensive metro area is so ludicrously out of reach that it doesn't even cross their mind. Most of them would prefer not to work for someone else—they'd rather be on their own—but they know how difficult that will be.

The more I listen to them, the more I realize that our theories about work are not useful to them. We need to do much, much better, and not because they are "millennials" but because the world has changed and so too must our understanding of what work is and what it means to people. I'm heartened by SIOP's efforts to lead this revolution, and I'm excited about all the good work that is going on to improve the world of work. In fact I got a little bit giddy when I read **President Bauer's** column this month; there are so many good things happening. We should all feel proud.

While you're reading this issue of *TIP*, also be sure to check out the two feature articles. In the first, **Sy Islam** and **Vivian Woo** build on the alternative rankings project to explore the question of where top programs get their faculty. Certainly interesting food for thought. In the second, **Kisha Jones** and **Bharati Belwalkar** begin a very important conversation about how race and ethnicity are classified for HR purposes and what the implications of those decisions might be for our science and practice.

I like to put controversial articles in *TIP*, because starting conversations is generally a good thing. I'm not too concerned with whether everyone agrees with everything they see. We're a diverse group and our perspectives differ. That said, I don't like to screw up. If you see something in *TIP* that is just plain wrong, I hope you will take the time to write a letter to me, and I will publish the letter immediately.

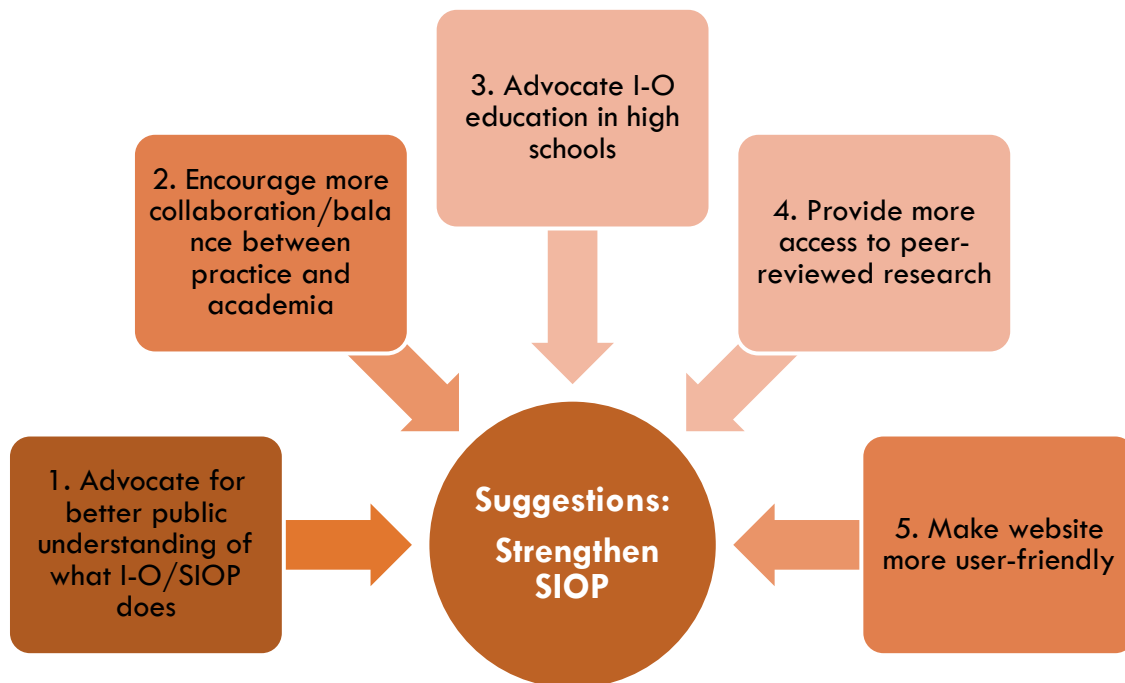
You might also observe that this issue of *TIP* is slim and trim. Many of you have commented to me that you are overwhelmed by *TIP's* length and end up skimming instead of reading. So, we're trying something new by moving some columns to semiannual and retiring others. I would love to hear your thoughts about what you like and what you want to see more of.

Finally, I want to note that my term as editor is coming to an end shortly, so please nominate yourself or someone else to take over in 2019. Send all thoughts to behrend@gwu.edu.

The President's Message: Membership Survey Suggestions and Related Initiatives

Talya Bauer

First, I want to thank 2018 SIOP Membership Survey subcommittee members **Kristine Olson** (Dixie State University), **Holly Lam** (US Foods), **Jamie Perry** (Cornell University), **Brittany Marcus-Blank** (General Mills), and **Jay Dorio** (Korn Ferry). As always, the SIOP Membership Survey affords us a window into our membership. Thank you to the 1,341 individuals who took the time to complete the survey. It was good to see that 91% said they planned to renew within the next year and that the overall engagement scores were 84%. The survey also indicates areas where SIOP can, and should, improve. I was heartened to see that in many of the suggestions given in the open-ended questions dovetailed with initiatives and activities we have begun throughout SIOP. Additional suggestions represent areas we must proactively address. Here, I focus on five of the top suggestions from the recent membership survey and share initiatives designed to address these specific issues.



1. **Advocacy efforts for better public understanding of what I-O and SIOP do.** Since I joined SIOP in 1990, I have never seen a greater public understanding of what I-O psychology is. The US Department of Labor ranked I-O psychology as the #1 fastest growing job in 2015 (they projected 53% growth from 2012 to 2022).¹ Indeed this year, *The Wall Street Journal* wrote in an article entitled "What will be the hot jobs of 2018?" that "Psychologists will be in demand, but growth will be fastest in industrial and organizational psychology."² With that said, SIOP still has a HUGE way to go before I-O psychology becomes a household name or is widely understood by the public, government, or organizations. To summarize the reaction to the 2015 article, ABC News asked "What the heck is that?"³ but the more I-O focused articles that come out, the better for public understanding. On this score, I am heartened by what three (of many) specific groups within SIOP are doing right now to increase our brand and help bring *Science for a Smarter Workplace* to a broader audience.
 - SIOP's *Visibility Committee*, under the leadership of **Nikki Blacksmith** (ARI/Blackhawke Behaviour Science) has been hard at work via events and initiatives to advocate for better understanding and visibility about what I-O and SIOP do. For example, the Visibility Committee:

- Generates a Top-10 Trends survey and report. These findings are disseminated to the public via reports, videos and educational materials, a social media campaign, and SIOP conference sessions
 - Facilitates the SIOP Conversation Series (<http://www.siop.org/conversationseries.aspx>)
 - Students and Academia subcommittee has developed a live webinar event designed to educate current and future I-O students on career options. A SIOP expert is invited to discuss their career and answer questions from aspiring I-O psychologists. The event has been growing in success with over 260 participants at the last conversation series event
 - The *Top Minds Bottom Lines* event hosted by Visibility each year targets CEOs and CHROs to learn from top I-O talent. If you know CEOs or CHROs in the DC/VA/MD area you think would benefit and would like to invite for April 2019, contact **Victoria Mattingly** (v.p.mattingly@gmail.com), and she can provide a discount code so you can personally invite the non-SIOP leader
 - The Visibility Committee is also working hard on the Veteran Bridge-Building Initiative.
- Visibility partners with the prosocial subcommittee and SIOP's Government Relations Advocacy Team (GREAT) Committee headed up by **Alex Alonso** (SHRM) to help with advocacy efforts, build relationships with other organizations, and bring awareness to veterans transitioning projects and reintegration, and how I-O can help with that work.
 - The GREAT committee and Lewis-Burke, our advocacy partner in DC, work throughout the year to expand policymakers' knowledge of the evidence base around workforce issues, to influence funding for education and research involving workplace topics, and to enhance the brand of I-O psychology as the science of work.
 - **Adam Kabins** (Korn Ferry Institute) leads advocacy activities around veteran hiring practices. **Richard Landers** (University of Minnesota) leads an advocacy team exploring the technology-enabled workforce including topics such as cybersecurity and insider threat. Specifically, these two advocacy area team leads have presented the collective evidence base on their respective areas at events sponsored by the Department of Defense, the Veterans Administration, and the Department of Homeland Security over the last 3 months.
 - In coming months, team leads will be established for topics such as Defense & Security, Education & Training, and Healthcare & Healthcare Quality. GREAT works year round with Lewis-Burke Associates LLC on SIOP-government relations and impact.



2. **Encourage more collaboration/balance between practice and academia.** In the 2018 SIOP Membership Survey, only 58% of respondents indicated favorable agreement with the statement "*I believe that SIOP effectively balances the interests of practitioners and academics.*" When I think about SIOP and a big part of what makes it such a special experience, it is our unique blend of those working in industry, as consultants, within government, and within academia listening to one another, learning from one another, and partnering with one another. This gives us an enormous competitive advantage, and we are all the richer for these experiences. But part of the cost of our "big tent" within SIOP is that it is easy for those on one side of the continuum or another to feel like their needs are not being adequately met. I recently revisited a column by **Joan Brannick** (Brannick HR Consulting) for her Practitioners' Forum *TIP* article from January 2011 entitled, "The

Scientist–Practitioner Gap: What’s Next.” What I noted was that Joan asked, what are some of the most important values that practitioners and academics *share*? These responses resonate with me as core values and foundations for helping to shape ***Science for a Smarter Workplace***.

Responses included:

- A sincere desire to solve problems
- A desire to have organizations see their work as valuable
- A belief that sharing what we learn and learning from the work of others is essential to advancement of our knowledge
- A desire to organize and present knowledge in novel ways
- A desire to produce high-quality work that can positively impact both organizations and employees
- An interest in psychology in organizations, the core content of our field
- A recognition that I-O psychology is an applied field of study
- A recognition that the field is continually evolving and continuous learning is required

We have much in common and keeping this up front in mind while also being influenced by our “day jobs” and helping SIOP evolve and remain relevant and vital can be a challenge. But it is a worthy challenge. There are lots of organizations where only academics or only practitioners attend, but SIOP is special in that it blends the common interests of both practitioners and academics. For this reason, there can be tensions, and it can be messy, but the value created by this tension is what makes SIOP so uniquely valuable to our profession. Thank you for contributing your perspective, skills, and expertise to SIOP through your membership and engagement.

In order to help keep it that way, we need to continue to seek ways to leverage our strengths to increase and improve our overall brand across the profession. Here are some specific things we are currently doing to help strengthen the balance across our membership spectrum.

- SIOP’s premiere journal (<http://my.siop.org/journal>)—*Industrial Organizational Psychology: Perspectives on Science and Practice*—is a place where those in all walks of I-O life can learn from one another and collaborate with one another via focal articles and commentaries. Under the latest in a long line of fantastic editors, **Ronald Landis** (Illinois Institute of Technology) has been working to make IOP stronger than ever. This includes the new *IOP* Practice Forum under the guidance of **Alexis Fink** (Intel), which is designed to allow those practicing I-O psychology to share what is discovered. This might take the form of case studies, commentaries, critiques of practice-related topics, reviews of evidence-based best practices, and discussions of practice-related challenges and how those have been overcome. Please visit <http://www.siop.org/journal/PFGuidelines.aspx> for more information about submission and review guidelines. Send submissions questions to Alexis Fink at alexisfinkphd@gmail.com.
- **Elizabeth McCune** (Microsoft) and the SIOP Annual Conference Thursday Theme Track Committee will include a focus on events for collaborations and translations designed to help facilitate collaboration, balance, and excellence between practice and academia. More details on this are to come, but it is a fantastic group including **Joe Allen** (University of Nebraska), **Madhura Chakrabarti** (Bersin by Deloitte), **Molly Delaney** (Google), **Chloe Lemelle** (AT&T), **Ketake Sodhi** (University of Akron), and **Jessie Zhan** (Wilfred Lauer University).
- The new SIOP *Organizational Science, Translation, and Application* series is being led by **Steve Kozlowski** (Michigan State University) as editor. He is currently forming his team and fleshing out the details and approach of the series. We are looking forward to powerful collaborations and useful content from this new SIOP initiative.

- There are several key initiatives being developed by the Science–Practice Opportunities for Translation (SPOT) task force to help get the word out and to celebrate both science and practice. These include translation vehicles, publicizing science–practice collaborations and successes, and creating high impact events designed to enhance SIOP’s visibility via scaled I-O Roadshows and talks. Special thanks go to **Frederik Anseel** (King’s College, London and EAWOP President), **Kathryn Dekas** (Google and head of Google’s People Analytics PiLab), **Lorenzo Galli** (Mercer Consulting and cofounder of Science for Work), **Julie McCarthy** (University of Toronto), **Eduardo Salas** (Rice University), Paul Thoresen (SIOP’s Electronic Communication Committee Chair), **Donald Truxillo** (University of Limerick), and **Shonna Waters** (BetterUp) who all agreed to participate. In addition, Elizabeth McCune (Microsoft and SIOP’s Program Chair-in-Training) is an ex-officio member of the task force.

3. **Advocacy efforts for I-O education for high school students.** **Roni Reiter-Palmon** (University of Nebraska-Omaha) and the Bridge Builders subcommittee is working toward organizing a volunteer drive to have hundreds of SIOP members volunteer to give talks about I-O psychology and SIOP in AP Psychology classrooms around the country. In addition, the SIOP Getting I-O into Intro Psychology Textbooks (GIT) task force has been attacking this issue from multiple fronts including:

- Creating I-O content to share widely via the Creative Commons License, discussions with APA leadership
- Reaching out to Division 2 of APA (the teaching division)
- Advocating with Education and Training for **Eden King** (President-Elect) to present at the National Institute on the Teaching of Psychology (NITOP) at St. Pete Beach, FL this coming January
- Identifying, targeting, and tracking I-O content within Introduction to Psychology textbooks
- Working to influence textbook authors and publishers regarding the importance and relevance of I-O content to psychology
- Publicizing the I-O content included within the AP Psychology exam.

Together, the ongoing focus on these initiatives should help to expose high school and early college students to I-O and highlight it as a critical part of psychology. The GIT task force members are task force Chair Joe Allen (University of Nebraska), **Georgia Chao** (Michigan State University and SIOP APA representative), **Nicholas Salter** (Ramapo College of New Jersey), **Jennifer Gibson** (Fors Marsh Group), and **Debbie DiazGranados** (Virginia Commonwealth University), with **Mikki Hebl** (Rice University and past Education and Training Committee chair) as a consultant to the committee based on her past work in this area.

4. **Providing more access to peer-reviewed research.** In 2011, under President **Adrienne Colella** (Tulane University), SIOP began offering access to peer-reviewed research as an add-on service to members for an additional fee (\$50; <http://www.siop.org/SRA/default.aspx>). The first year it was enacted, 5% of our membership subscribed to this service. Currently, 1,005 (or 10% of our membership) subscribe to it. So the question is whether what we offer is not enough in terms of quantity, is not good enough, if we are doing a good enough job publicizing its availability, or if another barrier such as price is a concern, which led to member suggestions to provide more access. I have asked **William Shepherd** (Wendy’s, SIOP Professional Practice chair) and **Brad Bell** (Cornell, SIOP Scientific Affairs chair) to survey members to evaluate the usefulness and quality of our current research access services and to make recommendations for ways to improve what we have. If you have ideas, please send them to Brad.Bell@cornell.edu.
5. **Major steps undertaken toward making the SIOP website more user friendly.** Our website has evolved significantly over the years. When it began around 1997, there were only 4,700 members and it primarily included *TIP*, organization links, and announcements. Today, SIOP has over 10,000 members and the website (www.siop.org) has over 8,000 pages. It includes numerous projects created over the last 2 decades. All aspects of member information and I-O-related professional information can be found on the website. All of

the interactions with members via paper mail and forms in 1997 are now done online through the website. In addition, my.siop.org is the supporting website that is a members-only area. It includes all the commerce modules including dues, conference registration, Awards and Fellows nominations, and Conference submissions. The design of the current website was implemented in 2008.

Today, SIOP is making a substantial investment in completely overhauling the SIOP website, having engaged a technology firm to assist us. This includes a new updated look and greater emphasis on the most commonly used areas of the website. The SIOP Administrative Office has engaged in the process including focus groups at the SIOP conference in Chicago, and a study of member usage using Google analytics. We hope to have the redesign completed by Q1 of 2019.

SIOP Governance Structure and Getting Out the Vote



Vote for Team SIOP!
SIOP Officer Elections Now Open
November 1-December 2, 2018

SIOP's leadership impacts the future of the I-O field. Your opinion matters.
Nominate today to help fill the leadership bench for "Team SIOP"!

In my last column I devoted attention to volunteering and SIOP's governance structure. SIOP is governed by our bylaws (voted upon by SIOP members and fellows), and our structure is an executive board comprising elected officials including the presidential trio, the financial officer/secretary, eight portfolio officers, and our APA Council representatives. We currently have four APA representatives. SIOP depends on your participation. Voting season for SIOP is upon us.

Your vote matters. Please invest in SIOP's future and vote for Team SIOP!

Be on the lookout for information regarding our Executive Board election, which begins November 1, 2018 and ends December 2, 2018. The positions on the ballot include president-elect and the officers overseeing the External Relations, Instructional and Education, and Professional Practice portfolios. Thank you to Eden King for her efforts as the SIOP Elections Committee Chair.

Plan to Attend the SIOP Annual Conference April 4-6, 2019



The SIOP Annual Conference is a huge undertaking and the pride of SIOP. We are in good hands with **Scott Tonidandel** (University of North Carolina, Charlotte) as Conference chair, **Tracey Rizzuto** (Louisiana State University) as Program chair, and Elizabeth McCune (Microsoft) as Incoming Program chair. They, along with the huge confer-

ence team, have been hard at work. The venue will be the Gaylord National, a short 15-minute ride from Reagan National Airport. The hotel sits on the Potomac River with beautiful views and boasts a giant glass atrium. It is a striking and fantastic venue complete with a water taxi to old Alexandria or Washington DC and over 30 restaurants and 150 shops next to the hotel. The great news- especially after last year in Chicago- is that it is spacious! The program will take place in the attached convention center with over 500,000 square feet of space. Workshops will be offered on April 3, 2019.

Speaking of Washington DC, the SIOP presidential trio (pictured here by the Capitol Building) had an opportunity to represent SIOP with several stakeholders last July. I outline more about our visit to DC below.

***SIOP Advocacy, Diplomacy, and Relationship Building:
Getting the Word Out about I-O and Amplifying SIOP's Reach***

A major emphasis of my Presidency is focused on ways that SIOP is made stronger through world-class science, practice, and science–practice partnerships and collaborations. As I envision it, one of the major obligations and tasks I have as SIOP president is to get the word out about I-O psychology and SIOP and to build relationships. A huge part of that work is to meet with as many influential individuals and organizations I can during my time as SIOP president. The I-O Roadshow went to Washington DC in July. Our time started with a day-long retreat at Lewis-Burke to set our advocacy agenda for the coming year under the leadership of **Alex Alonso** (SIOP GREAT chair) and Steve Kozlowski (Research and Science Portfolio officer). The next day, the SIOP presidential trio met with **Arthur Evans**, CEO of APA and key members of his staff. We had a productive meeting discussing ways that SIOP and APA can forge tighter partnerships and get applied psychology to the forefront of what people think of when they need to address workforce issues. I met with key staffers at the Senate to discuss ways SIOP can partner to solve workforce issues and leverage ***Science for a Smarter Workplace***.



(left) Fred Oswald, Alex Alonso, Eden King, Talya Bauer, Tammy Allen, Jeff Hughes, Steve Kozlowski (right)

The I-O Roadshow continued with a busy season of meetings and conferences starting in May and continuing into October as I write this column. Although I also have been meeting with organizations and individuals, I want to summarize the conferences and workshops below.

May

- Big thanks goes to **Margaret Beier** who worked tirelessly to curate the I-O content for at the Association for Psychological Science (APS). The 30th annual APS conference in San Francisco last May included some fantastic sessions. Among the highlights was the session entitled “Teamwork on the Way to Mars: Organizational Psychology Applied to Deep Space” with Daniel Newton (University of Missouri), **Shawn Burke** (University of Central Florida), **Suzanne Bell** (DePaul University), Steve Kozlowski (Michigan State University), and **Dorothy Carter** (University of Georgia) (photograph below).

Other sessions included a variety of posters as well as speakers on the topics of motivation, selection systems, biases, personality, career transitions, fit, and technology and the changing future of work by SIOP members. The sunset and view of the Golden Gate Bridge and Bay from the APS Presidential Reception was spectacular.

I look forward to seeing what Margaret and **Berrin Erdogan** generate for next year's meeting May 23-26, 2019 in Washington, DC.



"Teamwork on the Way to Mars" APS invited session participants with Margaret Bier.

June

- The Society for Human Resource Management (SHRM) annual conference was also in Chicago this year. They put on a pretty big and impressive show! I worked on forging connections between SIOP and SHRM, saw great talks, attended sessions, got some new books, and, I kid you not, bumped into a long-lost cousin from Costa Rica at the exhibitors booth, and I have a photo to prove it!
- The Alliance for Organizational Psychology (AOP) brings SIOP, EAWOP, IAAP-Div 1, and CSIOP together, with the goal of promoting the visibility of I-O psychology worldwide. Several SIOP members, including myself, attended the meeting of AOP at the 29th International Congress of Applied Psychology June 26-30, 2018 in Montreal. It was a good opportunity to connect with colleagues with affiliations in Belgium, Canada, Germany, Italy, the UK, the US, Singapore, Spain, and Switzerland including **Julie McCarthy**, outgoing Alliance Program Chair, **Frederik Anseel**, current EAWOP President, **Gudela Grote**, current Alliance president, and SIOP Members and Fellows **Gilad Chen**, **Kurt Geisinger**, **Sharon Glazer**, **Richard Griffith**, **Cornelius König**, **Karen Korabik**, **Filip Lievens**, **Jesús Salgado**, **Sabine Sonnentag**, **Daan van Knippenberg**, and **Fred Zijlstra** who were all awarded IAAP Fellowship at the meeting. It was also great to connect with SIOP-CSIOP leaders **Lynda Zugec** and **Gary Latham** (pictured to the right). SIOP Fellow, former Alliance President, and past EAWOP President **José Maria Peiró** was recognized by IAAP for his leadership.



July

- In July, I also had the pleasure of attending a workshop sponsored by the National Science Foundation focused on Organizational Science and Cybersecurity Workshop at George Mason University. The event brought together attendees from industry, government, and academia and included high caliber presentations and information sharing. SIOP was well represented with organizers **Reeshad Dalal** and **Daniel Shore**, presenters such as **David Dorsey**, Richard Landers, chair of SIOP's Future of Work committee, and **Daisy**

Chang, past SIOP Conference Chair and outgoing NSF officer as well as a host of other Team SIOP members presenting and in attendance. Speaking of NSF, new NSF officer Georgia Chao (SIOP APA Representative), started her 3-year term in July.

August

- The Center for Evidence-Based Management (CEBMA) hosted a day-long meeting in Chicago that I attended. It included sessions regarding evidence-based management techniques, decision making, teaching, and communicating. SIOP members **Rick Guzzo** (Mercer Workforce Sciences Institute) and **Lorenzo Galli** (Mercer Italy) presented on the topic of evidence-based consulting and lessons learned.
- The Academy of Management Annual meeting was also held in Chicago this year, and I returned to the Chicago Grand Sheraton for the fifth time in 12 months. The conference is always a good time to connect to colleagues and share what SIOP is working on. Several meaningful discussions took place including an in-person meeting of the SIOP SPOT Task Force and a meeting of SIOP and Alliance for Organizational Psychology (AOP) Presidents. The new Alliance Executive Board includes Gudela Grute (President), **Mark Poteet** (Treasurer), **Steven Rogelberg** (Secretary), and **Bonnie Cheng** (External Communications Officer).

October

- Hopefully you are reading this in time so that it isn't too late to attend the Leading Edge Consortium (LEC) which will be held October 19-20, 2018 in Baltimore, Maryland with workshops on October 18, 2018. The 2018 LEC Organizing Committee Members, **David Baker** (IMPAQ International), **Allan Church** (PepsiCo, co-chair), **Karen Grabow** (Grabow Consulting), **Raphael Prager** (PepsiCo), **John Scott** (APT Metrics), **Rob Silzer** (HR Assessment and Development, co-chair), and **Lorraine Stomski** (Walmart) have been hard at work developing a great program. The topic will be *High Potential: Identifying, Developing, & Retaining Future Leaders* (<http://my.siop.org/Meetings/Leading-Edge-Consortium/2018-LEC>). I hope to see you there!

SIOP Good Things

I also want to offer appreciation and call your attention to several good things that have happened or are happening as I write this. If you have something you would like to see highlighted here in future columns, please let me know.

- **United Nations.** The SIOP United Nations committee continues to make an impact via their *Innovation & Learning Brownbag Series* organized in partnership with the United Nations Office of Human Resource Management. In August, **Lori Foster** (North Carolina State University), SIOP Communications Portfolio officer, gave a well-attended talk on "Applying Behavioral Insights to HR." In addition, the UN team has expanded with a Geneva-based set of representatives including **Stuart Carr** (Massey University), **Drew Mallory** (KU Leuven), **Ines Meyer** (University of Cape Town), and Lori Foster. Special thanks to **Julie Olson-Buchanan** (Fresno State University) as chair of the UN committee for keeping their work vibrant.
- **Practitioner Needs Assessment.** This fall and winter, the Professional Practice Committee is conducting a Practitioner Needs Assessment. Please be on the look out to participate in one of their focus group and/or to respond to their survey. Please have your voice be heard. If you have questions, please contact **Emily Solberg** (SHL) at Emily.Solberg@shl.com

- It's Official!** For over 40 years, the *Principles for the Validation and Use of Personnel Selection Procedures* has served as a tremendous resource for SIOP members, and I am happy to report that the revised *Principles* (5th edition) was approved by the APA Council of Representatives as an APA guidelines document. SIOP has many people to thank for this achievement: **Nancy Tippins** (The Tippins Group) and **Paul Sackett** (University of Minnesota) (pictured to the right) co-chaired and worked closely and tirelessly with the *Principles* revision committee: **Winfred Arthur** (Texas A&M), **Tanya Delany** (IBM), **Eric Dunleavy** (DCI Consulting), **Ted Hayes** (U.S. Department of Justice), **Leaetta Hough** (The Dunnette Group), **Fred Oswald** (Rice University), **Dan Putka** (HumRRO), **Ann Marie Ryan** (Michigan State University), and **Neal Schmitt** (Michigan State University). Nancy and Paul then further edited the *Principles* based on both SIOP and APA member comments; and they guided the document through APA's legal review and the vote for approval at the 2018 APA Convention in August. Past President Fred Oswald is the current chair of the APA Committee on Psychological Tests and Assessment (CPTA), and he helped to coordinate as the *Principles* document was discussed between SIOP and APA. **Marianne Ernesto** (pictured above, far right) is the director of Tests and Assessment at APA, and she worked internally with APA, and externally with SIOP (Paul, Nancy, Fred) over the course of more than three years to see this through- thank you all – especially Paul, Nancy, and Marianne pictured here after the *Principles* was approved. Our APA representatives (Georgia Chao (Michigan State University), **Jeff McHenry** (Rainier Leadership Solutions), Gary Latham (University of Toronto), and **Steve Stark** (University of South Florida)) worked both behind and in front of the APA scenes in what was truly a Team SIOP effort. The updated version of the *Principles* keeps up with the current accepted science of selection, and with the previous edition have been approved in 2003, this 2018 update was long overdue. The document will be made available soon on the APA website, and SIOP Publications is currently discussing other ways to disseminate the *Principles*, both within SIOP as well as a document that we can proudly share and promote externally.
- SIOP-CARMA.** Under the leadership of **George Banks** (University of North Carolina), SIOP and CARMA recently partnered and completed the “2018 SIOP/CARMA Introductory Reviewer Development Series.” This was led by SIOP, with CARMA providing tech support; the live virtual panel sessions took place in August. They have made the recordings of the three sessions (about 3 hours total) available on the CARMA youtube channel (<http://carmamep.org/siop-carma-reviewer-series/>).
- Fellowship.** It isn't too late to start a SIOP Fellow nomination. Nominees must be current SIOP members for the last 2 years and have accumulated 10+ years of SIOP member status. Further, the nominator must demonstrate evidence that the nominee's contributions have had a meaningful, sustained, and unusual impact on the field of I-O psychology. The deadline for all materials to be submitted is November 1. The Fellowship information that appears on the SIOP website was recently updated to reflect last year's task force changes and updates. To see more about Fellowship criteria and nomination materials, visit <http://www.siop.org/fellows/>. The committee is chaired by **Derek Avery** (Wake Forest University) and Nancy Tippins is the chair-in-training.
- Registries.** SIOP has two registries and a locator service. Please sign up if you are interested. It is another way to be involved and find others interested in similar things while making SIOP stronger.

 - *CSR and Pro-social/Humanitarian I-O Registry:* <http://my.siop.org/Services/CSR-Prosocial-Humanitarian-I-O-Registry>
 - *Health, Safety, and Well-Being Registry:* <http://my.siop.org/Registry/HSWB>
 - *And the Consultant Locator Service:* <http://my.siop.org/cls>



- CHROs usually “set the table” in terms of human capital strategy, and this has major influence on HR budgets, work requirements and KPIs for HRVPs and COE leaders who hire consultants. We seldom have a direct line to hear these needs first hand at SIOP, with only two conference sessions over the last 10 years featuring live CHROs. **Mark Morris**, SIOP’s Learning Resources for Practitioners Committee chair, created and is piloting a CHRO Advisory Board, which includes a series of quarterly calls on specific topics such as “Developing a leadership pipeline” and involving 10 to 20 CHROs from diverse organizations to learn about SIOP, help SIOP focus in on key questions, and learn from I-O research and practice. I am looking forward to hearing how this initiative goes. Thank you Mark for being such a great ambassador for SIOP and the science and practice of I-O!
- CEMA Mentees. Please direct racial/ethnic minority graduate students with interest in participating in the CEMA mentoring program to reach out to siopcema@gmail.com
- **I am SIOP**. Photos at the Annual SIOP conference are a great thing. **You** are the face of SIOP. We are still gathering **I am SIOP** photos. Please email them to comms@siop.org

My presidential theme of **I am SIOP** was born out of my desire to articulate what makes SIOP so special. I realized that it is simply all of you, with your diverse backgrounds and ideas. **Every. Single. Member.** You make SIOP. You are SIOP. Especially on the closing reception dance floor...



It is a pleasure to represent all of you – thank you for your faith in me and for giving me this opportunity!

Notes

¹ <https://blog.dol.gov/2015/03/15/the-10-fastest-growing-jobs/>

² <https://www.wsj.com/articles/SB10001424052748704026204575266342935418962>

³ <https://abcnews.go.com/Business/americas-20-fastest-growing-jobs-surprise/story?id=22364716>

The Bridge: Connecting Science and Practice

“The Bridge: Connecting Science and Practice” is a *TIP* column that seeks to help facilitate additional learning and knowledge transfer to encourage sound, evidence-based practice. It can provide academics with an opportunity to discuss the potential and/or realized practical implications of their research as well as learn about cutting edge practice issues or questions that could inform new research programs or studies. For practitioners, it provides opportunities to learn about the latest research findings that could prompt new techniques, solutions, or services that would benefit the external client community. It also provides practitioners with an opportunity to highlight key practice issues, challenges, trends, and so forth that may benefit from additional research. In this issue, we explore how to apply science to enhance leader performance and diversity with **Jeff W. Johnson** and **Sharon Arad** of SHL.

Column Editors: **Kimberly Acree Adams**, Independent Consultant and **Stephanie Zajac**, Houston Methodist Hospital



Leader Edge: Applying Science to Enhance Leader Performance and Diversity

Jeff W. Johnson and Sharon Arad
SHL



Overview of SHL

We at SHL were honored to receive SIOP’s M. Scott Myers Award for Applied Research in the Workplace in 2018 for research supporting the development and validation of our Leader Edge selection, development, and succession management solution. Leader Edge helps companies articulate and prioritize the challenges leaders will likely face in their organization, and assesses a leader’s fit to role given those challenges.

SHL is the global leader in talent innovation, helping companies transform productivity through deeper people insight. Powering the future of business, our data and tools are proven to drive stronger, more sustainable business outcomes. Our assessment science, benchmark data, and analytics empower leaders and their teams to make confident, data-driven people decisions, when it matters most—transforming the way organizations recruit, manage, and develop talent. With 40 years of talent expertise, SHL is a trusted technology partner to more than 10,000 companies worldwide. We work with companies of all sizes in every industry across more than 150 countries, including 50% of the *Fortune* Global 500 and 80% of the FTSE 100. SHL employs over 300 I-O psychologists around the world.

Limitations of Existing Science for Matching Diverse Leader Profiles to Different Work Environments

Because of the increasing complexity of the work environment, demands on leaders have expanded in recent years. As the demands on leaders mount, leader performance suffers. Research indicates that nearly half of leaders who moved into new roles fail to meet their objectives and two-thirds are not adapting quickly enough to meet their business and strategic goals (Gartner, 2012; 2016). We observed that typical leadership programs tend to be predicated on a belief that a stable set of leadership competencies will enable leaders to become “agile” and perform effectively in any leadership role. Most organizations capture and communicate these competencies through leadership models, which identify the attributes that serve as the foundation for managing their leader talent. Our research suggested, however, that most successful leaders excel in a few specific areas rather than being effective across the board.

The variety of potentially successful leader attribute profiles is consistent with research showing that personality validity tends to be situationally specific, meaning the situation influences the relationship between personality traits and job performance. Meta-analyses show very wide credibility intervals around mean validity coefficients for personality traits (Tett & Christiansen, 2007) and major personality models recognize the importance of the situation as a moderator of the relationship between personality and job performance (e.g., Barrick, Mitchell, & Stewart, 2003; Johnson & Schneider, 2013; Tett & Burnett, 2003). These models agree that a personality trait will be most highly related to behavior when the situation is relevant to the trait’s expression and is not so strong that there is little opportunity for variance in behavior.

We can make general statements about moderators of personality–performance validity (e.g., autonomy, occupation), but it is very difficult to make specific predictions about how the many different aspects of a leader’s work environment may affect how his or her personality influences performance. This presents a problem for translating the knowledge we have about the situational specificity of personality validity into a practical application that enhances the predictive ability of personality assessments for leaders. Understanding how different work contexts affect personality–performance relationships requires both theory and extensive data to see the empirical relationships that exist in different contexts.

Context can be thought of as any relatively durable aspect of the work environment that could influence the occurrence of behavior in an organization or the relationships between variables, like certain job requirements, team composition, or organizational climate. To better understand the influence of context on the relationship between a leader’s individual characteristics and how he or she performs on the job, we conducted a large-scale study across dozens of organizations. We expected that the prediction of leader performance would be enhanced by incorporating context because different leader characteristics should be relevant to performance in different contexts. The goals of this research were to (a) measure a wide variety of specific contexts that have the potential to moderate personality–performance relationships, (b) demonstrate differential prediction of performance from personality scales based on context, (c) demonstrate improved prediction of performance and increased diversity among potential leaders in terms of leader attributes and demographic characteristics when taking context into account, and (d) create a leader selection and development product that allows clients to tailor solutions to the configuration of contexts that fits the work environment of a particular role.

Method and Results

Between 2014 and 2016, SHL conducted the largest validation study of its type to define a taxonomy of organizational context factors and investigate its usefulness in understanding leader performance. The study included nearly 8,700 leaders, 5,900 supervisors, and over 33,000 direct reports from 85 companies representing more than 25 industries globally. Data were collected from leaders at all levels of the organization—from front-line

managers to chief executives—on their personalities, work experiences, opinions, and work priorities. To measure personality, leaders completed the Occupational Personality Questionnaire (OPQ), a 32-scale forced-choice measure that uses item response theory to estimate trait levels on each scale. Leader performance was measured with a multisource performance rating instrument completed by each leader's supervisor and direct reports.

All participants also provided data that were used to define the leader's broad work context. For example, leaders completed a job analysis questionnaire to identify the most important aspects of their unique roles. Supervisors completed an opinion survey measuring business priorities and different aspects of the organizational culture. Direct reports completed an opinion survey measuring team functioning and characteristics. We created numerous context variables from these data that describe the unique work environment for any particular leader at the role, team, and organization level. Role-level challenges include aspects of the leader's job that often differ from role to role (e.g., the extent to which designing and driving new strategies is important to the job). Team-level challenges include the dynamics and makeup of the team, such as the need to transform a team with a high-conflict culture. Organization-level challenges include the business priorities and culture of the organization (e.g., the extent to which growing the business through innovation is a priority).

We used moderated multiple regression to identify context variables that moderate the relationship between OPQ scales and leader performance. For example, we found that the OPQ scale Independent Minded predicts overall performance in opposite directions depending on the level of importance placed on creating an environment that consistently yields creative and innovative ideas, products, or services from team members. When driving creativity is important, more independent-minded leaders tend to be seen as better performers. When driving creativity is less important, going along with the crowd tends to lead to perceptions of better performance.

For context variables that had significant moderating effects on multiple scales, we conducted further analyses by computing within-context correlations. For context variables that had multiple OPQ scales with high within-context correlations with performance compared to the overall sample and unique patterns of predictors compared to other challenges, we identified the unit-weighted composite of OPQ scales that best predicted overall performance. In sum, we found that (a) personality scales vary widely in their ability to predict leader performance in different contexts, (b) the same scale can have a positive relationship with performance in one context and no relationship or a negative relationship with performance in another context, and (c) prediction is dramatically higher when personality scales are selected for the context. Predicting leader performance within contexts yielded three times better prediction on average than was possible when we did not incorporate context.

This is the first large-sample research that has documented multiple specific contexts that influence personality assessment validity and in what way. In the real world, however, leaders rarely operate within a single context, and this has been a major impediment to context research (Johns, 2006). Indeed, we found that leaders in our study had an average of 6.8 contexts operating simultaneously, with 80% having between 3 and 11. It would be impossible to directly compute the validity of an OPQ composite that is based on multiple challenges because selecting a sample of leaders with the same configuration of challenges would result in extremely small sample sizes. This presented a significant issue in creating a realistic practical application from this research. To address this issue, we developed an innovative application that uses the logic of synthetic validation to estimate validity while considering multiple contexts simultaneously. Rather than breaking a job down into its relevant job components and using component-level validities to estimate validity for the whole job (Johnson et al., 2010), we break the leader role down into its relevant contexts and use within-context validities to estimate validity for all contexts simultaneously. Not only are we able to avoid the problem of considering context effects in isolation, we found that validity is improved when the job is described by multiple contexts. This innovative process allows us to consider multiple contexts simultaneously, allowing a single algorithm to be applied to the leader role, which is described by all relevant contexts.

Leader Edge

Based on this research, we were able to create Leader Edge, an application that uses a data-driven approach to automatically match leaders to the contextual challenges of the role. The development of Leader Edge followed an extensive and rigorous market and pilot testing process. We engaged with more than 100 current and potential customers through an iterative process, testing all product aspects ranging from value proposition and positioning to product concept and implementation. Throughout the market testing phases, we learned and evolved the product. Based on the market testing, we fine tuned the positioning and value proposition, obtained feedback on which product features were most appealing and differentiated, identified use cases (e.g., placement, development), and gained feedback on the most valuable reporting features.

We pilot tested Leader Edge with four clients who have used Leader Edge insights to inform multiple leadership decisions, including identification of senior management potential, placement into critical leadership roles, and development of leaders. One of the pilot clients was a US staffing company. This client was looking for tools to enhance its senior management development program. Through its contextual lens, the Leader Edge solution complemented other tools being used and provided a more targeted approach, fine tuning development plans to the specific context in which leaders were operating. Today, other clients are using Leader Edge as objective, valid input into succession management, as well as providing a more tailored experiential development roadmap to prepare leaders to successfully handle critical contextual challenges they will encounter. For example, one client described why and how they are using Leader Edge for leader development and succession management:

We looked at best practices and at what other companies were doing to solve the problem—to take a subjective process and make it data-driven and actionable. And we needed a business case: the financial drivers and business rationale for finding talent and developing people for their next career moves. The most critical part of the new system is that it's contextual. We look at the six most important challenges someone will face in a new role and compare them to candidates' skills and competencies, motivations, and runways. We can then focus on what's needed for a successful transition. We've shifted from a gut-driven process to a shared language. ("When Hiring Execs, Context Matters Most," 2017, p. 21)

Beyond the increase in predictive power, one additional benefit of a contextual approach to leader selection is its ability to improve leader diversity. Our data show that there is no consistent advantage to any ethnic or gender group across OPQ scales. We do find that women and African Americans tend to score higher than men or Caucasians on many of the context-specific solutions in Leader Edge. Thus, Leader Edge not only does not show adverse impact against protected groups, its use is likely to promote greater representation of underrepresented groups in higher levels of leadership.

Understanding that different types of individuals can be successful depending on the context opens the door to considering a more diverse set of candidates when making leader selection and development decisions. Traditional leadership strategies assume that the same characteristics and competencies are needed throughout the organization, but focusing on a generic competency profile diverts attention away from individuals who possess diverse experiences, perspectives, and backgrounds. At the extreme, this practice inadvertently reinforces bias in decisions and results in leadership teams composed of people who sound and look the same. Shifting the focus to context-specific prediction not only optimizes the fit between leaders and their work environment to produce better performance but also increases the possibility that more diverse leader profiles will be considered for key positions.

Conclusion

Leader Edge translates the knowledge we have about the situational specificity of personality validity into a practical application that enhances the predictive ability of personality assessments. Leader Edge provides an

interactive platform for organizations to implement data-driven decisions for improved leader selection, placement, and development. Algorithms that power the solution enable users to optimize leadership assessment for the unique combination of challenges present for targeted leadership positions. Challenges can be selected for one particular position, a set of similar positions, or an anticipated future state. As such, in addition to selection decisions, organizations are using Leader Edge to better target leader development and build adaptive leader pipelines. Leader Edge is different from any other leader assessment system currently on the market because it moves away from a one-size-fits-all, static assessment to a customizable, adaptive talent management tool that can support operational HR objectives as well as long-range business strategies.

References

- Barrick, M. R., Mitchell, T. R., & Stewart, G. L. (2003). Situational and motivational influences on trait-behavior relationships. In M. R. Barrick & A. M. Ryan (Eds.), *Personality and work: Reconsidering the role of personality in organizations* (pp. 60-82). San Francisco, CA: Jossey-Bass.
- Gartner. (2012). *High-impact leadership transitions research report*. Retrieved from <https://docplayer.net/4194979-High-impact-leadership-transitions-a-transformative-approach.html>
- Gartner. (2016). *Q4 executive guidance: Driving performance in volatile markets*. Retrieved from <https://www.cebglobal.com/content/dam/cebglobal/us/EN/top-insights/executive-guidance/pdfs/eg2017ann-driving-performance-in-volatile-markets.pdf>
- When Hiring Execs, Context Matters Most. (2017, Sept.-Oct.). *Harvard Business Review*, pp. 20-22.
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31, 386-408.
- Johnson, J. W., & Schneider, R. J. (2013). Advancing our understanding of processes in personality-performance relationships. In N. Christiansen & R. Tett (Eds.), *Handbook of personality at work* (Ch. 3, pp. 30-52). New York, NY: Routledge.
- Johnson, J. W., Steel, P., Scherbaum, C. A., Hoffman, C. C., Jeanneret, P. R., & Foster, J. (2010). Validation is like motor oil: Synthetic is better. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 3, 305-328.
- Tett, R. P., & Burnett, D. B. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500-517.
- Tett, R. P., & Christiansen, N. D. (2007). Personality tests at the crossroads: A response to Morgeson, Campion, Dipboye, Hollenbeck, Murphy, and Schmitt (2007). *Personnel Psychology*, 60, 967-993.

Recognizing Shonna Waters: Distinguished Early Contributions—Practice Award Winner

Liberty J. Munson, PhD
Garett Howardson, PhD

As part of our ongoing series to recognize the achievements of SIOP's award winners, the last edition of *TIP's* Award Winner article focused on several of our Distinguished Contributions Award winners: **Eden King**, one of the winners of our Distinguished Service Contributions Award, **Scott Tannenbaum**, Distinguished Professional Contributions Award, and **Dov Eden**, Distinguished Scientific Contributions. In my haste to send it to press, I overlooked one other Distinguished Contributions Award winner—**Shonna Waters**. So by way of apology for my oversight, this article is focused solely on her accomplishments, the work that she did to earn this award, and her insights for how you, too, could become one of next year's Distinguished Contributions Award winners!



Share a little a bit about who you are and what you do.

My name is Shonna Waters. I'm originally from Fort Washington, Maryland but now live in Arlington, Virginia with my husband, two daughters, dog, and cat. I'm a traditionally trained scientist-practitioner. I'm a University of Minnesota grad and have spent the first 10+ years of my career in organizations that truly straddle both spaces, like HumRRO and PDRI. I'm currently a regional vice president of Behavioral Science at a late stage start-up, BetterUp. BetterUp has let me continue to blend science and practice, splitting my time across research, consulting, and leadership. At the time of the nomination, I was the vice president of Research at SHRM.

Describe the research/work that you did that resulted in this award. What led to your idea?

This award is designed to recognize the span of a career rather than a project, so I largely credit the award to the privilege of working with amazing people, in terms of both their skill and generosity, throughout my career. My earliest days were spent at HumRRO, working alongside some of the best scientist-practitioners around: **Bill Strickland, Deirdre Knapp, Suzanne Tsacoumis, Teresa Russell, Cheryl Paullin, Rod McCloy, Chris Sager, Dan Putka** (the list goes on). My HumRRO colleagues modeled that I didn't have to choose science or practice and taught me to love both rigor and practicality. I continued to work there even after I went to Minnesota to get my PhD. I had a similar experience at PDRI where I worked with Janis Houston, **Wally Borman, Jeff Johnson, Rob Schneider**, and others who both modeled the skills and gave me opportunities to grow my own.

Working at HumRRO and PDRI was like going to grad school. I got to work on applied research projects across a wide array of topics: job analysis, competency modeling, organizational assessments, educational research, leadership development, and, of course, a lot of statistics, research methods, and test development and validation projects. I went from HumRRO to the National Security Agency (NSA) to work in a start-up within their HR organization started by **Dave Dorsey** and Wayne Baughman. At NSA, I did cool I-O projects like what I did in the consulting world but as an internal consultant. As an internal consultant, I gained a thirst for the thrill of building something from the ground up and for implementing solutions. I learned that every project, even a measurement project, is really a change management effort. A few projects that solidified those lessons for me were designing, developing, and validating the selection system for language and intelligence analysts and leading the agency's performance management transformation. The scope of the projects and the critical nature of the agency's mission made my time at NSA particularly impactful to me.

I left NSA to focus on getting science to more HR professionals. I joined other I-Os, like **Alex Alonso, Mark Schmit, Scott Oppler, and Jeff Pon**, as SHRM's VP of Research to develop and implement the vision for more rigorous research translated into customer-centric formats.

What did you learn that was surprised you?

I have learned so many things already in my relatively short career that it's hard to choose just one thing! The meta-lesson in it all may be to hold things loosely and embrace complexity. The world is full of gray--many, many shades. I joke that my grad school self wouldn't recognize my present-day self because I've gone from one end of our field ("I") to the other ("O"). In the end, I've found that although it's tempting to reduce the world to black and white, right and wrong, "I" or "O," the power usually lies somewhere in the middle, and we can learn the most from things that make the least intuitive sense to us. I credit Dave Dorsey and Wayne Baughman with imparting those life lessons, and they've made me far more curious and willing to be wrong.

What do you see as the lasting contribution of the work that led to this award on your thinking about application of I-O principles in organizations?

I believe that if we begin with the end in mind and apply the foundational concepts of our field, we will be able to help organizations meet changing demands from the market and their employees. Innovation is often borne of necessity and many of our traditional tools and processes are ripe for innovation.

Who would you say was the biggest advocate of your research/work that resulted in the award? How did that person become aware of your work?

Alex Alonso nominated me for the award, and Dave Dorsey originally encouraged me to apply. Teresa Russell and **Paul Sackett** also wrote nomination letters from the I-O perspective. Jim Seacord and Pat Byrd wrote nominations from the perspective of client impact, and Ron Morgan wrote a nomination from the perspective of my impact as an adjunct faculty member at GW and Georgetown. I worked with each of them as a colleague or consultant at various times throughout my career.

To what extent would you say this work/research was interdisciplinary?

I really enjoy interdisciplinary work. I don't typically start a literature search through I-O sources. I search for solid evidence on the topic regardless of discipline. Throughout my work in the testing space, I frequently pulled in literature from education, cognitive psychology, and neuroscience. When my work shifted to change management, organizational behavior and performance management, work from anthropology, sociology, and counseling psychology became relevant to me.

In my current role, BetterUp has an explicitly interdisciplinary approach. My boss is a psychiatrist; I work with other I-Os, data scientists, a behavioral economist, positive organizational psychologists, and people with backgrounds in adult development, clinical psychology, counseling, and social work every day. We're all working together to create sustainable behavior change.

Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now and how did you move into this different work/research area?

I am still working as a scientist—practitioner but in a different company and different application. I wanted to be more closely involved in what seems to me like a shift in the world of work that includes a push for more meaning, purpose, and autonomy. BetterUp offered an intersection of my interests and the chance to help build something. I now work at the intersection of science, technology, and design to further our understanding of behavior change, understand our client's business goals and context, and design programs that integrate the two.

I still do some leadership coaching in my free time and continue to teach off and on (although I've moved from research methods and stats to coaching skills). I also continue to enjoy writing and presenting on a range of topics.

What's a fun fact about yourself (something that people may not know)?

Janis Houston once described herself as an adrenaline junkie, and that probably fits me too. I didn't really fall into adventure until I was in grad school, but now, I love trying new things so I'm always trying to push my own limits. I've skydived, taken trapeze lessons, run a marathon, done Ragnar and a Spartan race, and participate in strength competitions.

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now...)

Everyone comments on how small our field is but it's really true! Someone who is your client today may be a coworker tomorrow, so try to leave the other person in every interaction feeling better than when they entered it. Creating goodwill is a good general principle, but it may be even more important in our field where six degrees of separation may really be two.

Project Highlights From the Application:

I began my career in selection with a focus on fairness and bias.

- In graduate school, I studied topics, such as linearity in the upper end of the ability– performance distribution, modeling stereotype threat in SAT data, meta-analytically investigating the role of socioeconomic status on the ability–performance relationship, and determining the effect of test coaching (both formal and informal). Dissertation focused on evaluating the tradeoffs in terms of validity and subgroup differences for *g* and specific abilities.

Job/Occupational Analysis

- I conducted job and practice analyses in high impact jobs and occupations, such as system operators/power dispatchers for the Edison Electric Institute and to support the licensure exam for physical therapists and physical therapist assistants at FSBPT.
- I developed a new methodology for using military job analytic information to inform test specifications for the Armed Services Vocational Aptitude Battery (ASVAB), the military’s selection and classification battery.

Testing/Selection

- I supported a wide range of test development and validation studies, including
 - Designed, developed, validated, and supported the implementation of the Cognitive Ability Test Battery (CATB), a suite of new prehire assessments, including a cognitive test battery comprising four nonverbal reasoning tests, a test of English proficiency, a constructed response writing test, a logical reasoning test, and a personality-oriented biodata tool designed to assess motivation and personality. These assessments are now in use in selecting intelligence and language analysts at the National Security Agency.
 - Designed and developed fully customized, client-owned, high fidelity simulations (“virtual role plays”) for civilian managers at the Department of Defense (DoD) for use in (a) development and (b) promotion assessment. The online simulations used multilevel animations and branching technology to place the test taker in realistic situations. The use of branching technology allows the tool to track and score responses at several points during the assessment process. The development followed a content-validation approach to ensure job relatedness and realism.
 - Developed and administered assessment centers for the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and the Social Security Administration. The ATF assessment center is used to promote supervisors and identify executive potential. The SSA assessment centers are used for selection and leadership development.
 - I managed and led technical aspects of large credentialing programs including:
 - A multiyear project providing technical support and maintenance on the Certified Professional in Learning and Performance (CPLP) certification program for the American Society of Training and Development (ASTD). This certification included a multiple-choice knowledge test and a work sample portion.
 - Managed the development of two continuing competence exams for the Federation of State Boards of Physical Therapy.
 - I conducted data analyses related to the validation of entry-level selection tests for three job series within the Bureau’s Intelligence Career Services: intelligence analyst, language analyst, and surveillance specialist. Responsible for creating the operational version of the job knowledge test (a criterion measure) based on pilot data, as well as the operational version of a measure of critical thinking skills, which was part of the predictor battery. Participated in data collection activities during the pilot study.
 - I designed a validation strategy framework for the ongoing validation and roll out of tests to other parts of the agency, which identified a strategy to balance scientific rigor/professional and legal requirements, with the need to minimize the resources required to obtain validation evidence.
 - I collaborated with researchers from Language Testing to develop an operational length short-form of an English proficiency and writing test. Provided psychometric consultation and assistance in developing the data analysis plan, conducting and interpreting analyses, developing a test maintenance plan, and documenting the study.

- I supported a range of other test development efforts for public and private sector clients such as USPS, DoD, Verizon, U.S. Army and Navy, Tennessee Highway Patrol, Sprint, and American Express ranging in formats (e.g., situational judgment tests, structured interviews, clerical tests, biodata, personality tests, cognitive ability tests, declarative knowledge tests).
- I conducted a meta-analysis of clerical ability tests.

Performance Management

- I led the design and transformation of NSA's promotion, performance management, and awards and recognition systems to reduce administrative burden, increase transparency, promote fairness, and strengthen the performance culture. This large-scale change initiative is a multiyear project that involves collaborating with partners across the agency and working with a large cross-functional human resources working group to implement system changes. Designed and delivered briefings to garner support for the program at all levels (up to Deputy Director) within and outside the agency.

Leadership Development

- I provided feedback to members of the Senior Executive Service (SES) at the Department of Treasury who participated in a 360-degree assessment using the OPM 360. The purpose of this work was to provide independent, third-party facilitation to help executives interpret their feedback and apply it to a developmental plan.
- I received certificate in Leadership Coaching from Georgetown University's Institute of Transformational Leadership and received ACC from ICF. I now work with leaders across organizational levels, sectors, and industries, such as nonprofits, IT, contracting, and real estate as an independent coach.

Organizational Development

- I conducted climate studies within the intelligence community (IC). These studies included conducting structured interviews regarding the psychological climate and its various subcomponents, and content analysis of the qualitative results of the interviews. Documented the results in written reports and conducted debriefings to agency leadership for a small number of IC components.
- I consulted on leadership and business challenges facing a directorate of Acquisition organization, including facilitating a leadership off site, and conducting strategic planning activities. Performed action planning to carry out additional business changes and human capital initiatives.

Program Evaluation

- I conducted a large-scale evaluation of the Department of Defense's (DoD) Defense Senior Leadership Development Program (DSLDP), the premier civilian leader development program for the DoD. The purpose of DSLDP is to develop senior civilian leaders with the enterprise-wide perspective needed to lead organizations and programs, and achieve results in the joint, interagency, and multi-national environments. Within the DSLDP program evaluation, conducted an evaluation of the process for leadership development evaluation and made suggestions for best practices based on research in leadership development.
- I developed the evaluation plan for the recently established Special Salary Rate (SSR) for science, technology, engineering, and math (STEM) work roles. The evaluation plan was briefed to a congressional staffer from the House Permanent Select Committee on Intelligence (HPSCI). Collaborated with colleagues from across HR to collect baseline and recurring metrics to assess the impact of the SSR on recruitment (internal and external), retention, and engagement. Continued to serve as senior project advisor.
- I commissioned a joint working group to develop a return-on-investment (ROI) strategy for prehire testing at the agency. As part of that effort, drafted the initial metrics, collected information about archival data sources, met with stakeholders, and enlisted participation.
- I served as a technical advisor to senior leadership team developing an evaluation strategy for an agency-wide transformation effort.

Max. Classroom Capacity: My Brain Got Drained! And It Didn't Take Long...

Loren J. Naidoo
California State University, Northridge



Welcome readers!

I just began a new academic position at a business school in Southern California! Last year my wife started her dream academic job nearby, and with three young boys at home, we felt that it was unfair to deprive their lovely grandparents (who also live nearby and, incidentally, are *awfully* good babysitters) of them. It had nothing to do with the weather. Or the salary increase. Or the beaches. Or the weather—sorry, did I already say that? In all seriousness, I am so excited about the incredible professional opportunity to join a dynamic and congenial group of teachers, researchers, and students at CSUN!

Anyway, to get to the point, I figured (a) I'm not the only I-O academic who has moved from a psychology department to a business school, (b) others out there might be contemplating such a move, and (c) it might be of value to talk to some folks who have done it and share their wisdom regarding what to expect. Towards that end, I reached out to **Allison Gabriel** and **Lily Cushenbery**, both of whom are I-O psychology PhDs now teaching in business schools. I also drew on my own experiences teaching business students in the international executive MS in HR and Global Leadership and PhD in Management programs at Baruch College, my former employer.

Before we get into it, please note that much has been said of the trend of I-O psychologists joining business schools—if you haven't already you may want to read the *IOP* focal article by Aguinis, Bradley, and Brodersen (2014) and its associated commentaries. Aguinis et al. discussed potential implications on the field of I-O of a "brain drain" of elite I-O researchers moving from I-O doctoral programs to business schools. In contrast, the goal of this column is to talk about what differences there may be and what to expect when shifting from teaching in a psychology department to a business school.

To frame the conversation appropriately: I am an I-O psychologist, having received my PhD from The University of Akron and a BSc in psychology from McGill University. Allison Gabriel also has her PhD in I-O psychology from the University of Akron, as well as an undergraduate degree in psychology from Penn State. Lily Cushenbery has her PhD in I-O psychology from Pennsylvania State University and an undergraduate degree in psychology from Fresno State University. So we are all psychologists by training. I've condensed the discussions I had with Allison and Lily around four questions.

1. *What were your reasons for joining a business school?*

As I noted earlier, my reasons for joining a business school were mainly personal. In contrast, both Allison and Lily noted strong professional reasons underlying their reasons. For Allison, her decision was a combination of market forces and fit: "As an undergrad, I TA'd for a variety of psychology and sociology classes, and as a PhD student, I taught Intro to Psychology and Quantitative Methods to undergrads, and was a TA for a PhD quantitative statistics seminar. Based on these teaching experiences, I always assumed I would be teaching psychology students as a faculty member, but the market obviously worked out differently! When I first went on the market in 2012, I was a better fit for business school departments than I-O departments in terms of research needs, so as a newly minted PhD, I found myself teaching Organizational Behavior at the undergraduate level immediately."

Lily's experiences in grad school and as a postdoc were influential in her decision: "I... did a post doctoral research fellowship at the International Center for the Study of Terrorism [at Penn State] and then got a job in OB at Stony Brook. Penn State had a practicum program that gave us several years of hands-on projects with

companies, and I also did a few other consulting projects during graduate school as well. It was a great fit for me because I've always liked the applied side of our research. I truly believe in the scientist–practitioner model and do some consulting work in addition to my university role. These experiences have really shaped my research questions and focused my work on questions people need to have answered. Teaching MBAs is also fun because when they share their experiences in class it can help guide my leadership and innovation research.”

Because my own job search was extremely geographically limited, I considered and applied for positions in psychology and business, and evaluated each opportunity holistically. I identify strongly as an I-O psychologist, so it was a big plus to me that CSUN has other I-O psychologists in the business school. This made me feel that my colleagues would better understand what I bring to the table. I have applied to other business schools in which the search committee members seemed genuinely confused or uncertain about what an I-O psychologist is. In addition, unlike Lily, who has a behavioral research lab at her business school, having my own lab was not an option. Therefore part of my calculus was how well I could shift my focus to non-lab based research and rely on collaborators for future lab studies. So, those of you who are considering teaching in a business school might wish to reflect on the extent to which your research interests would be supported in a business school and the extent to which your future colleagues are familiar with I-O psychology.

2. What is the biggest difference between teaching in a psychology department compared to a business school?

The consensus seems to be that the most salient difference is the increased need to focus on application in business school classes. For Lily: “the expectation from business students is that research will be translated into actionable solutions that they can use immediately. Though I do discuss the importance of theory in class, I try to end each day with a summary of key concepts that can be translated into effective behavior change.” For Allison: “the biggest difference in teaching is the framing of the content—in psychology, I would spend ton a ton of time discussing study design and components of the research in lots of nitty gritty detail. In business, I still talk about research but facilitate discussions less focused on study design and more focused on implication—knowing what we know from research, how can we improve current practices and the experience of employees at work?” These views are consistent with my own experience teaching MS and MBA students. Thus, if you are thinking of teaching in a business school you should probably consider whether you are able to and interested in teaching in this way. Personally, I would have found this very challenging to do as a newly minted PhD with little consulting or work experience.

3. In what ways (if any!) do you think that your training in I-O psychology did NOT prepare you well for teaching in a business school?

The answer to this question likely depends on the PhD program that one attends. All three of us are products of programs that excel at research. I don't think I would have been particularly well prepared, but mostly because at the time my interests were more on the theory side, and my visa status largely precluded me from seeking out opportunities for consulting or other applied work. In contrast, my fellow Akron alum Allison felt well prepared: “I think the biggest switch was digging really deep into case studies and current events, more so than I would in a psychology class where we would focus more on methodological aspects of the research we were discussing. In business, the real world application has to be immediate, and because of this I find myself spending a lot of time each morning on Twitter searching for current events and curating popular press articles I can incorporate into my slides. The “why is this important?” question has to come before the “why is this interesting?” question, and that was a bit of a flip for me as a researcher/psychologist.” Another area in which we may be ill prepared is in the use of business jargon, as Lily noted: “I don't feel that I-O psychology teaches you some of the jargon associated with business, and general business structures and strategy. For example, when an MBA student tells me his career goal is to be a “CSO” (a chief sustainability officer), I have to go back to my office and google that. However, we do have an edge with our depth of knowledge in our own field of psychology, and that has been invaluable to me in both my teaching and consulting work.”

4. Are there particular teaching methodologies or assessment practices that you do differently in business compared to psychology classes?

The shift in teaching methods follows the shift in emphasis towards application. I use more case studies, self-assessments, business simulations, and activities designed to build specific work or leadership competencies (e.g., communication skills, feedback delivery). This was true for Allison as well: “When teaching business, I’ve increased my use of simulations and case studies for sure. Students want to see the hands-on application of the content versus discussing the theories and ideas more abstractly. That’s been a fun change to my class that I didn’t use too much when I was teaching psychology courses. My exams have also taken a much more application-based approach than they did previously.” For me, part of this is a tendency to get “less into the weeds” on research methodology than I might in analogous psychology classes.

Additionally, there may be other advantages of shifting from a psychology department to a business school. Lily noted that her transition has benefited her research on innovation: “As an innovation researcher, I know that this unique combination of experiences and perspectives benefits our field... There is a lot of opportunity to advance the field of leadership through lab research. MBAs are working adults, and putting them in controlled situations can give us more indications of causality than we may be able to get in the field. We can get answers to different kinds of questions through this research method, which is more often used in psychology.” I also view classroom methodologies such as self-assessments and business simulations as great opportunities for research. For example, I routinely ask my undergraduate and graduate business students to complete multiple self-assessments throughout the semester. Business simulations that test teamwork, leadership, creativity, and so on, particularly those structured as activities that take place for prolonged periods of time, may also be designed as randomized experiments, panel studies, longitudinal studies, and so forth, and may yield valuable insights worthy of publication.

As a final note, most academics that I know who love to teach love it partly because they believe that teaching is a two-way street: We learn as much from our students as they do from us. I have found this to be especially true with business students whose backgrounds and interests differ most from my own. Like Lily, I have spent my fair share of my time googling jargon, acronyms (lots of these!), cases, CEOs, and careers that I knew nothing about before students raised them in class. Although challenging, I think this is one of the great joys of teaching.

Thanks to Allison and Lily for their wisdom! Allison can be contacted via email at asgabriel@email.arizona.edu. She can also be found on Twitter--@ProfASGabriel--talking about the trifecta of management research/teaching, food cravings, and pictures of animals. Lily can be contacted through her Leadership and Creativity Research Lab website at www.theLCLab.com or you can follow her on Instagram and Facebook @theLCLab.

Readers, as always, your comments, questions, and feedback are welcome!

Reference

Aguinis, H., Bradley, K. J., and Brodersen, A. (2014). Industrial-organizational psychologists in business schools: Brain drain or eye opener? *Industrial and Organizational Psychology*, 7, 284-303.



Digital Megatrends 2018: What They Are, How to Act



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Technology trends are continually being monitored and assessed to spot the digital forces that are already upon us and those that are just over the horizon. Although some technologies will first impact us as a consumer, nearly all will eventually find their way into the workplace. A technology trend becomes a business imperative becomes a driving force reshaping the work of leaders and employees. For this issue of the Modern App, we've researched eight high-profile technology reports and distilled 95 individual trends to core themes—the digital megatrends—disrupting the modern workplace. Ultimately, we seek to apply an integrative structure to create a broader view of where I-O professionals must soon engage.

We chose eight well-regarded and multidisciplinary technology reports for 2018—report authors span research firms, consulting organizations, and technology providers with varying market perspectives yet a unifying focus on crucial technologies. Importantly, most of these reports deal with technologies in a context broader than the workplace—that is, they prioritize the technology context first. We feel that this is a key orientation for I-O psychologists preparing for the effects of digital trends on the businesses that employ us, hire us for consulting engagements, and draw on our research to inform their practices.

Looking beyond the work context and to multi-disciplinary information sources also allows these megatrends to serve as a natural complement to those determined through the excellent and long-running [SIOP's Top 10 Workplace Trends list](#) with its distinctively workplace-first orientation. Note that though in some cases, full-length versions of the tech reports require a subscription or purchase, executive summaries sufficient to understand the basic nature of each trend cited are freely available. The eight reports from which we distill the digital megatrends:

- [Gartner Top 10 Strategic Technology Trends for 2018](#)
- [Forrester Top Technology Trends 2018-2020](#)
- [Accenture Technology Vision 2018](#)
- [SAP Trend Report 2018: Emerging Technology Trends](#)
- [CIO Trend 2018](#)
- [Edelman Digital Trends 2018](#)
- [Deloitte Tech Trends 2018](#)
- [Future Today Institute 225 Emerging Tech Trends](#) – unique to this report given its comprehensiveness, we focus on the subset of trends projected to impact the future of work (we nonetheless recommend reading the full report for eye-opening information about dozens of additional leading-edge technologies)

We began by affinity clustering each of the 95 trends cited across the reports into 15 categories and further into three tiers based on their prevalence across reports. The full grid showing our trend classification model across all reports is shown in the Appendix. In this column, we focus our detailed discussion only on the Tier 1 trends—those we consider digital megatrends—identified in a majority (5 or more) of the underlying technology trend

reports. We plan to explore Tier 2 and 3 trends in later Modern App columns and/or SIOP conference sessions, and we welcome input on actions you may already be taking on these within your own research and practices.

For each megatrend, we overview it, project the nature of its intersection with the workplace, cross-reference how it's characterized within individual technology trend reports, and propose framing considerations for how I-O professionals can engage with it.

Three Tiers of Trends

Tier 1: Digital megatrends <i>In 5 or more of the reports</i>	Tier 2 <i>In 3-4 of the reports</i>	Tier 3 <i>In 2 of the reports</i>
1. Artificial intelligence (8) 2. Blockchain/cryptocurrency (7) 3. Extended reality (6) 4. Enterprise security/infrastructure (5)	5. Productivity bots/conversational systems (4) 6. Personalized experiences (4) 7. Digital twins (3) 8. Digital workforce transformation (3)	9. Internet of things (2) 10. Edge computing (2) 11. Quantum computing (2) 12. Human-machine convergence (2) 13. Automation/robotics (2) 14. Data to insights as asset (2) 15. Personal privacy (2)

Companies are continuously seeking ways to do things faster and better. Technologies that are joining the market offer a promise for efficiency and better collaboration. The possibilities are tantalizing and continue to draw corporate attention. The digital megatrends below are those your company may already be researching or investing in and, if not, will soon. These megatrends are setting the pace of technology-driven business change.

Digital Megatrend #1: AI Is Priority A1

Overview

- Artificial intelligence (AI) is the only trend cited across all eight reports, often in multiple forms and facets within each.
- Of the many operationalizations of AI, most focus on how machines can imitate and ultimately improve upon human intelligence. Using human reasoning as a model is just one of many reasons companies and people invest in AI. Others include building systems to think like humans or to get a machine to figure out how human reasoning works.
- Many technologies that utilize AI are focused on building machines that use human reasoning as a guide to enhance capabilities to drive efficiency and productivity.
- Although many people fear AI, it's often because they worry it will replace them. However, many applications instead focus on solving cognitive problems related to human intelligence (includes learning, problem solving, pattern recognition, etc.).

Intersection With the Workplace

- Enhanced decision making through improved efficiency and predictive accuracy for personnel decisions currently made by humans.
- Reinvented business models drawing on data as a corporate asset.
- Personalized customer and employee experiences based on structured and unstructured data gathered from and about them.

How Characterized Within the Technology Reports (See the Appendix for Information About Which Reports Cite Which Trend)

- AI in hiring; the AI cloud; more consolidation in AI; China's AI boom
- AI foundation; event driven
- Software learns to learn
- Citizen AI: Raising AI to benefit business and society
- Machine learning; neuromorphic hardware
- User-facing AI
- Artificial intelligence: Going behind the buzzword
- Artificial general intelligence

I-O Psychology Considerations

- Ensuring a clearer and more comprehensive change management strategy for new AI tools in which companies invest. As systems and tools get smarter at work, it will allow employees to use their time in a more productive and strategic way. Clearing establishing that picture will be key.
- How can we guide nonbiased AI through stronger data ethics awareness and toward blended approaches combining the strengths of machine and human intelligence for business and personnel decisions?
- What approaches are most effective for building and communicating "explainability" for AI and machine learning models for those affected by their outcomes to maintain procedural and distributive justice?

Digital Megatrend #2: Blockchain Redefining Trust and Verification Models

Overview

- Blockchain's defining feature is that data is not stored in one single location, meaning records are publicly verifiable. That is, there is no centralized database that a hacker can disrupt. By storing blocks of information that are identical and incontrovertible across its network, the blockchain cannot be controlled by any single entity and has no single point of failure.
- Referred to as the new backbone of the internet, uses of blockchain go far beyond cryptocurrencies to any market with valuable assets. Originally applied to bitcoin and digital currency, companies are rapidly finding new uses for it. The distributed trust systems enabled through blockchain are challenging models of centralized authority.

Intersection with the Workplace

- Blockchain, in conjunction with the gig economy and personal ownership of one's career, is being used to provide an immutable, verifiable record of an individual's accomplishments, including for job-related certifications and experiences.
- As blockchain disrupts traditional authorities for what constitutes "trusted" information, the balance of workplace power will shift from institutions to individuals, and from centralized to decentralized data storage systems.

How Characterized Within the Technology Reports

(See the Appendix for information about which reports cite which trend)

- Blockchain; Cryptocurrencies
- Distributed Trust Systems Challenge Centralized Authorities
- Blockchain to Blockchains

- Blockchain 2.0
- Internet of Thinking: Creating Intelligent Distributed Systems

I-O Psychology Considerations

- What qualifications and experience structures will serve effectively as a mutually exclusive, collectively exhaustive groundwork for a blockchain approach applied to personnel decisions?
- Will increased consistency and verifiability of this information extend the use of employee qualifications beyond their current applications for employee decision making, and will it extend mediocre levels of validity for experiences versus other hiring tools?
- In a decentralized system housing this information, who bears responsibility for establishing job-relatedness of the variables captured therein, and how can organizations confidently incorporate these data into their selection processes?

Digital Megatrend #3: Extended Reality All Around Us

Overview

- How we look at and experience the world are changing.
- Augmented reality (AR) is enhancing a version of your reality by adding digital information on the image of something. One of the most well-known examples of this is Pokémon GO.
- Virtual reality (VR) is using technology to create a simulated environment, which means the world in front of you is completely different than reality. Digital reality is a wide spectrum of technologies and experiences that digitally simulate reality in one way or another.
- A mixed reality example is the Microsoft HoloLens, a holographic computer allowing users to interact with blended virtual and augmented aspects of their environment.

Intersection With the Workplace

- Training approaches will evolve to include these types of methods. With prices dropping, these approaches will increasingly become another—and perhaps even a primary—way of providing experiences so learners can practice the job in a realistic, yet simulated environment.
- Customer and candidate experiences will change. Imagine helping future candidates get a glimpse at what the company and environment will be like.
- Fused experiences will require new business models and new organizational structures to connect the physical and virtual experiences of both customers and employees.

How Characterized Within the Technology Reports

(See the Appendix for information about which reports cite which trend)

- Immersive Experience (AR, VR, mixed reality)
- Customer Experience Becomes Immersive
- Extended Reality: The End of Distance
- Immersive Technologies (AR/VR)
- Augmented Reality: The Age of Augmented Reality Is Here
- Digital Reality

I-O Psychology Considerations

- Which interpersonal constructs, for example, empathy and extraversion, best translate to

mixed reality representation and measurement through simulated interactions among employees and with customers?

- How must training approaches be adapted to the availability of mixed reality technologies, and how will these technologies change employee expectations for length and immersiveness of training experiences?
- What job characteristics (e.g., KSAOs) are most—and least—suited to representation using augmented and virtual reality? Will these techniques extend to complex individual contributor and leadership roles, or will they be limited to positions with a higher emphasis on physical and routine-based skills?

Digital Megatrend #4: Enterprise Security and Infrastructure Is a Global Concern

Overview

- It's no surprise with the digital disruption and increased use of devices, apps, and other software, that data privacy and security infrastructures will need to continue to improve. People-centric security will be critical to protect individual data.
- Also, more and more businesses are being born in the cloud leading to many considerations and demands for managing a business online and ensuring data privacy.

Intersection with the Workplace

- Data management and security technologies that enable contextual privacy will not only involve technology capabilities but business practices. The use of personal data and data-centric security approaches will continue to evolve.

How Characterized Within the Technology Reports

(See the Appendix for information about which reports cite which trend)

- Ransomware as a Service; Hacktivism on the Rise; Strange Computer Glitches Will Keep Happening
- New Open Source App; Vulnerabilities; Organizational Doxing
- Encryption Management; Zero-Day Exploits on the Rise
- Remote Kill Switches
- Continuous Adaptive Risk and Trust
- Automated Security Intelligence and Breach Response Unshackle S&R (Security and Risk)
- The Public Cloud Accelerates Business Innovation
- Data Veracity: The Importance of Trust
- Enterprise Data Sovereignty
- Reengineering Technology

I-O Psychology Considerations

- Privacy investments can change a culture of a company which will require an I-O lens for establishing an environment of employee trust despite a heightened level of suspicions about external “bad actors.”
- As hacking, phishing, and other corporate attacks escalate, what new or adapted skills and traits must employees possess (e.g., new forms of vigilance and technology savvy) to reduce rather than add security risks to the use of technology in the workplace?
- How can job analysis techniques be structured and revised to keep up with changing demands

for security-related skillsets, both within and outside the IT function?

Closing Thoughts

The [quickenning pace of technology adoption](#) dramatically amplifies the urgency for business professionals to attend and react to impending technology influences. In this column, we've reviewed a set of 2018 technology trend reports, resulting in key digital megatrends for I-O psychologists to become aware of, and to act on, through our research and practice efforts. Our ownership of and proactivity on these megatrends will heavily determine our role and influence in mediating their soon-approaching impact on employees, leaders, customers, and the future of work itself.

Reach out with feedback and suggestions!

Contact us on LinkedIn: [Tiffany Poeppelman](#) & [Evan Sinar](#)

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- The Modern App: How Technology Is Advancing Team-Centric Work – [March 2018](#)
- The Modern App: Technology & I-O Crossovers: How Multidisciplinary Views Are Vital to Our Learning – [June 2018](#)

Appendix: Cross-Report Trend Classification

	2018 Technology Trend Reports							
Trend categories	<i>Future Today Institute 225 Emerging Tech Trends</i>	<i>Gartner Top 10 Strategic Technology Trends for 2018</i>	<i>Forrester Top Technology Trends 2018-2020</i>	<i>Accenture Technology Vision 2018</i>	<i>SAP Trend Report 2018: Emerging Technology Trends</i>	<i>CIO Trend 2018</i>	<i>Edelman Digital Trends 2018</i>	<i>Deloitte Tech Trends 2018</i>
URL	https://futuretodayinstitute.com/2018-tech-trends-annual-report/	https://www.gartner.com/smart-erwithgartner/gartner-top-10-strategic-technology-trends-for-2018/	https://go.forrester.com/blogs/top-technology-trends-2018-2020/	https://www.accenture.com/us-en/insight-technology-trends-2018	https://www.sap.com/documents/2018/04/02112563-007d-0010-87a3-c30de2ffd8ff.html	https://www.infotech.com/research/ss/cio-trend-report-2018	https://edelman.digital.com/trends/	https://documents.deloitte.com/in-sights/TechTrends2018
AI (8)	AI in Hiring The AI Cloud More Consolidation in AI China's AI Boom	AI Foundation Event-Driven	Software Learns to Learn	Citizen AI: Raising AI to Benefit Business and Society	Machine Learning Neuromorphic Hardware	User-Facing AI	Artificial Intelligence: Going Behind the Buzzword	Artificial General Intelligence
Blockchain/crypto (7)	Blockchain Cryptocurrencies	Blockchain	Distributed Trust Systems Challenge Centralized Authorities	Internet of Thinking: Creating Intelligent Distributed Systems	Blockchain	Blockchain 2.0		Blockchain to blockchains
Extended reality (6)		Immersive Experience (AR, VR, mixed reality)	Customer Experience Becomes Immersive	Extended Reality: The End of Distance	Immersive Technologies (AR/VR)		Augmented Reality: The Age of Augmented Reality Is Here	Digital reality
Enterprise security/infrastructure (5)	Ransomware as A Service Hacktivism on The Rise Strange Computer Glitches Will Keep Happening New Open Source App Vulnerabilities Organizational Doxing Encryption Management Zero-Day Exploits on The Rise Remote Kill Switches	Continuous Adaptive Risk and Trust	Automated Security Intelligence and Breach Response Unshackle S&R (Security and Risk) The Public Cloud Accelerates Business Innovation	Data Veracity: The Importance of Trust				Enterprise data sovereignty Reengineering technology
Productivity bots/conversational systems (4)	Productivity Bots	Conversational Platforms Intelligent Apps and Analytics			Conversational Systems Intelligent Assistants		Conversational Technologies: Seeing Beyond the "Chatbot" Buzz	

Personalized experiences (4)	Adaptive Learning		Employee Experience Redefines Apps		Contextual Work-space		Personalization: For a Tech-Savvy Personalization Strategy, Focus on Humans	
Digital twins (3)		Digital Twins			Digital Twin	Digital Twin		
Digital workforce transformation (3)			Digital Employees Enter the White-Collar Workforce				Digital Transformation: Digital Disrupts the Org Chart	The new core
Internet of Things (2)		Intelligent Things	IoT Shifts Computing Toward the Edge					
Edge computing (2)		Cloud to the Edge	IoT Shifts Computing Toward the Edge					
Quantum computing (2)					Quantum Computing			Quantum Computing and Encryption
Human-machine convergence (2)					Human-Machine Convergence Brain-Computer Interface			No-collar workforce
Automation/ robotics (2)					Robotic Process Automation Advanced Robotics Autonomous Robots/ Drones/ Vehicles	Robotics		
Data to insights as asset (2)			Insights-Driven Firms Outpace Competitors				Data & Analytics: The Power of Big Data Relies on Bold Strategies	
Personal privacy (2)	The General Data Protection Regulation Takes Effect Privacy Laws Net Neutrality Differential Privacy Data Retention Policies Backdoors		Contextual Privacy Boosts Brand Value					

Organizational Neuroscience: Does Your Brain Love Advice?

Understanding the Neuroscience Behind Advice Exchange in the Workplace

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Imagine this scenario: You are faced with a conflicting work decision with an impending deadline. Normally you would gather more information about each choice and think through each strategy, but you don't have a lot of time. You go to one of your trusted colleagues to ask for advice or recommendation on which choice you should take. The advice is reasonable, and you made an informed decision in a short period of time. You really appreciate your colleague and your colleague was flattered that you asked her.

The advice exchange described above demonstrates the effectiveness of high-quality advice and its ability to promote organizational learning, improve decision quality, and even enhance professional relationships. In modern day organizations, many require their employees to complete challenging tasks and make numerous difficult decisions in novel environments. In these settings, employees can benefit significantly from seeking and taking advice as a way of learning and acquiring accurate information in an efficient manner (Larrick & Soll, 2006).

Acting on high-quality advice can save time and improve work decisions, but advice exchange has not been widely examined in the workplace. Given that organizations often operate in complex and dynamic environments that emphasize ongoing learning and acquisition of new competencies, understanding how the advice exchange processes unfold in organizations can be critical in facilitating this behavior in the workplace. Organizational neuroscience research can offer new insights into workplace issues (Waldman, Ward, & Becker, 2017). In this article, I will explore some basic questions about the neuroscience behind people's motivation and the social benefits of seeking and taking advice, as well as implications for workplace culture and learning.

Taking Advice

Rather than making decisions in isolation, people often make decisions by combining recommendations from others (i.e., advice) with their own opinions or experiences, particularly for difficult decisions (Bonaccio & Dalal, 2006). This is an example of social learning, which relies heavily on advice taking, which transmits information more reliably than just observational learning alone, especially when mistakes are costly. Furthermore, advice has typically been found to be more accurate and timelier (Harvey & Fischer, 1997; Henrich & McElreath, 2003).

Advice Exchange From a Neuroscience Perspective

From a broad perspective, research suggests that following advice has adaptive values for human cultural evolution and that social learning is an important aspect of how we acquire new information and make decisions (Biele, Rieskamp, Krugel, & Heekeren, 2011). Seeking and taking advice is part of that social learning process. Research suggests that humans want to follow advice, particularly if it comes from a trustworthy source (Biele et al., 2011). This social connection creates a reward response in the brain (i.e., septal area). At the neurobiological level, individuals wish to follow trustworthy advice because of its association with a reward response which reinforces the behavior by stimulating the release of oxytocin, a neurotransmitter known to facilitate trust (Kosfeld, Heinrichs, Zak, Fischbacher, & Fehr, 2005). This consequently creates a cycle of advice taking that is rewarding and socially reinforcing, and people are more likely to continue advice exchange once they engage in the behavior. In other words, exchanging advice is a social process and on a neurobiological level, it feels "good" to take advice from others.

So people like taking advice from others, what about giving advice? Research has also shown that people like getting asked for advice (Brooks, Gino, & Schweitzer, 2015). The study found that individuals perceived advice

seekers as more competent when they personally sought their advice compared to when they sought advice from others. It seems that the advice exchange process can reinforce social relationships.

What Are the Implications for Work?

Employees are often making difficult decisions, and taking appropriate advice can potentially offset the time and resources needed to gather the necessary information. Advice is directive and action oriented and can quickly guide an employee to take action or select certain options (see Brooks et al., 2015 for difference in conceptualization). In the workplace, asking and taking advice can potentially help transmit information, facilitate efficient organizational learning, as well as establish better interpersonal relationships among the employees.

What Are Some Potential Downsides?

There are some potential drawbacks to taking advice in the workplace. There is a general tendency for people to follow advice from “experts,” and this can be problematic if the advice is flawed. Research (Suen, Brown, Morck, & Silverstone, 2014) shows that the brain region of anterior cingulate cortex (ACC), which has been shown to be implicated in ambiguity and conflict (Hsu, Bhatt, Adolphs, Tranel, & Camerer, 2005; Krawczyk, 2002), prompts people to reconcile the conflict. This suggests that there may be an obedience reflex to expert advice, which may explain why individuals sometimes choose to blindly follow advice of “experts” on a variety of decisions (e.g., financial, medical, organizational).

How Would This Impact Organizations? What Can Organizations Do?

Perhaps organizations with more collaborative environments can foster more opportunities for people to partake in social learning via advice exchange. This can be particularly beneficial because it strengthens people’s connections and allows for higher quality decision making (Harvey & Fischer, 1997). Additionally, organizations can attempt to promote advice exchange among employees by helping break down silos of knowledge to make it easier for employees to identify expertise and seek out the appropriate advisors. Specifically, managers often may not have front-line employee knowledge, which means they may have to seek and take advice from their subordinates. If organizations can encourage managers to take advice more often to improve their decisions, it can help set an example for other employees to seek and take advice when it’s appropriate and necessary. Just watch out for bad advice!

References

- Biele, G., Rieskamp, J., Krugel, L. K., & Heekeren, H. R. (2011). The neural basis of following advice. *PLoS Biology*, 9, 1-11.
- Bonaccio, S., & Dalal, R. S. (2006). Advice taking and decision-making: An integrative literature review, and implications for the organizational sciences. *Organizational Behavior and Human Decision Processes*, 101, 127-151.
- Brooks, A. W., Gino, F., & Schweitzer, M. E. (2015). Smart people ask for (my) advice: Seeking advice boosts perceptions of competence. *Management Science*, 61, 1421-1435.
- Harvey, N., & Fischer, I. (1997). Taking advice: Accepting help, improving judgment, and sharing responsibility. *Organizational Behavior and Human Decision Processes*, 70, 117-133.
- Henrich, J., & McElreath, R. (2003). The evolution of cultural evolution. *Evolutionary Anthropology: Issues, News, and Reviews: Issues, News, and Reviews*, 12, 123-135.
- Hsu, M., Bhatt, M., Adolphs, R., Tranel, D., & Camerer, C. F. (2005). Neural systems responding to degrees of uncertainty in human decision-making. *Science*, 310, 1680-1683.
- Kosfeld, M., Heinrichs, M., Zak, P. J., Fischbacher, U., & Fehr, E. (2005). Oxytocin increases trust in humans. *Nature*, 435, 673-676.
- Krawczyk, D. C. (2002). Contributions of the prefrontal cortex to the neural basis of human decision making. *Neuroscience & Biobehavioral Reviews*, 26, 631-664.
- Larrick, R. P., & Soll, J. B. (2006). Intuitions about combining opinions: Misappreciation of the averaging principle. *Management Science*, 52, 111-127.
- Suen, V. Y., Brown, M. R., Morck, R. K., & Silverstone, P. H. (2014). Regional brain changes occurring during disobedience to “experts” in financial decision-making. *PloS one*, e87321.
- Waldman, D., Ward, M.K., & Becker, W. (2017). Neuroscience in organizational behavior. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 425-444, 2017. <http://dx.doi.org/10.1146/annurev-orgpsych-032516-113316>

TIP-Topics for Students

Planning Your Career While in Graduate School: Tips from Professionals in the Field

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Keywords: career planning, career development, graduate students, applied careers, academic careers

Imagine that you are interviewing for a spot in an I-O graduate program. You have just finished answering questions about your academic background, your research interests, and the faculty members with whom you are interested in working. Now the interviewers ask you to fast forward and let them know what you plan to be doing with your degree, 10 years down the line. How do you even begin to answer that question?

The career question is often one of the most challenging questions that comes up during a graduate school interview in I-O psychology. After all, very few applicants have had significant exposure to the field, given that so few universities offer undergraduate courses in I-O (let alone full majors or concentrations). Even students who do have undergraduate backgrounds in I-O psychology are most likely still learning about the various types of academic and applied career paths. Without having seen what is out there, it can be difficult, frightening even, to think about planning one's career. Importantly, this challenge is not unique to prospective students. Career planning can be difficult regardless of how far along one is in graduate school, particularly if it has not been a consistent focus. Given how important career planning is, we thought it would be an ideal focus for this TIP-Topics column.

The purpose of this column is to provide I-O students with important information about careers in the field, so that they can feel well-equipped and empowered to plan their own. Because the four of us are certainly not experts on career planning, we reached out to eight I-O professionals and sent them a series of questions about the subject. To ensure that we obtained a diverse range of perspectives, we contacted people from a variety of professional backgrounds. We spoke with Dr. **Kristen Shockley** (assistant professor, University of Georgia), Dr. **Alicia Grandey** (professor, Penn State University), Dr. **Peter Rutigliano** (principal, Mercer|Sirota), Dr. **Sy Islam** (principal consultant, Talent Metrics; and assistant professor, Farmingdale State College), Dr. **Brian Ruggeberg** (partner, Aon), Ms. Melissa Champine, (partner and head of Operations, Aon), Dr. **Harold Goldstein** (professor, Baruch College), and Dr. Ourania Vasilatos (management analyst, New York State Unified Court System; president of the Metropolitan New York Association for Applied Psychology, 2017-2018). Each of the following sections contains some of the key insights and common themes that came out in their responses. Our hope is that graduate students can use this information to make informed decisions about their careers.

When Students Should Start to Think About Their Careers

There are countless aspects of graduate school life that students need to adjust to when they start their programs. For example, they often need to become more adept at conducting independent research, decide which advisors they want to work with, prepare to teach undergraduate courses, and adjust to living in a new area, all

at the same time. With each of these things hanging over their heads, career plans may be one of the last things on their minds. Most of the professionals that we spoke to mentioned that students should not feel pressured to make decisions early on but that it can be beneficial to start thinking about which aspects of the field they find most interesting. For example, Dr. Islam suggested that unlike in college, it may not be prudent for graduate students to “figure it out as they go.” Rather, students should start thinking about where the degree might take them, either before they apply or toward the very beginning of their programs. He noted that this can be a fairly simple process. For example, students can ask professors and older students questions about what different careers are like. Students can also let them know the skills that they are hoping to develop and ask whether they know of relevant projects that are available. This can get the ball rolling and help students decide what careers might be of interest to them. Similarly, Dr. Vasilatos suggested that graduate students start to think about potential career paths as early as possible, so they can have enough time to explore their options before they graduate. In addition, Dr. Grandey noted that students should keep an open mind from the very beginning when pursuing a career in academia or practice. This would allow students to pursue more varied experiences that can prepare them for either career path. Dr. Goldstein recommended that students start to think about their careers from the very beginning but that it really should be an ongoing process throughout graduate school. He noted that many professional development experiences (e.g., publishing, teaching, internships) can prepare students for both academic and applied careers, so it can be useful to consider some of these experiences early on.

That said, Dr. Rutigliano also wanted to assure students that although it can be useful to start career planning early, it is also never too late to switch tracks. He started his career as a researcher, then transitioned to practice, and then became a professor before deciding that he wanted to move back into practice. Although he acknowledged that these types of career shifts can be challenging, he stressed that they are absolutely doable if one remains committed to the transition.

The consensus here was that graduate students should start learning about different types of career paths early on in graduate school. Starting early can help students become more attuned to their interests so that they can make more informed decisions down the line, whether they choose one avenue for their whole career or explore multiple options with the vast field of I-O psychology.

How to Determine Whether to Go Academic or Applied

Perhaps the biggest question that students need to answer at some point during graduate school is whether they want to pursue a career in academia, practice, or some combination. Many of the professionals we spoke to recommended that students conduct some form of a self-assessment to determine which path might be a better fit. Dr. Grandey recommended that students take an actual self-assessment online in order to determine how their interests align with different career paths. Furthermore, Dr. Ruggeberg suggested that it can be helpful for students to consider which parts of the field they find particularly exciting (e.g., teaching, project work, client-facing opportunities), what occupational factors they value most (e.g., pay, autonomy, time off), and what their core strengths are (e.g., analyzing data, theorizing, building relationships, managing projects). Dr. Islam echoed some of the same sentiments. He recommended that students think back on their prior coursework, research, and applied experiences to determine which areas of the field they are most passionate about and then use those insights to continue to learn more about those areas. Furthermore, Ms. Champine recommended that it is never too early for students to ask themselves some simple questions about the type of work that they find most engaging, because there is considerable variation between academia and practice. For example, graduate students can reflect upon whether they would prefer to work with clients or students and whether they would prefer to lead organizational initiatives or academic research projects.

The consensus here was that if students can find alignment among their interests, values, and strengths, then they can make more informed and confident career decisions. Further, self-assessments can be a useful tool for finding this alignment.

Another common suggestion was that graduate students should continuously pursue opportunities to learn more about these two sides of the field. Dr. Shockley recommended that students pursue experiences relevant to both academia and practice to get a feel for what these two paths entail. In terms of academia, she recommended that students get heavily involved in research projects, publications, and teaching experiences. She also recommended that students pursue summer internships to gather a better sense of what the applied world is like. Dr. Islam implored students to do their due diligence before making decisions about the types of jobs they want to pursue (a job analysis, of sorts!). Both Dr. Grandey and Dr. Goldstein suggested that students can do this type of due diligence by talking with people from different professional backgrounds and get a sense as to how they spend their time, what they like about their jobs, what they dislike, and what they find most challenging. Dr. Vasilatos also recommended that graduate students attend career days and seek out career coaches in order to learn more about these two paths.

Finally, it is important to note that students do not necessarily have to make a decision to pursue only one of these paths. Many professionals find ways to work in both academia and practice. For example, there are many tenured faculty members who also work in consulting or even own their own practices. There are also people who primarily work in practice but also serve as adjunct faculty members so that they can continue to teach and do research. Dr. Grandey went as far as to say that the “academic–consulting dichotomy is false,” and that it is not “all or none”. Hopefully this is comforting to students who have interest in working in both realms once they graduate.

Important Tips for Preparing for a Career in Academia

We also asked the group of professionals about the types of professional development opportunities that can best prepare students for academic and applied careers. Nearly every person we spoke to suggested that teaching, research, and publishing are immensely beneficial for either career path. Not only do these experiences help students build their CVs, but they also help them develop transferable skills such as communication, presentation, writing, and data analysis.

These experiences are particularly crucial when it comes to academic careers. Drs. Vasilatos, Goldstein, Islam, and Rutigliano all recommended that students interested in academia seek out teaching or teaching assistant opportunities whenever they are available. These types of early-career experiences can help students determine whether teaching is something that they enjoy and want to be doing on a long-term basis. Furthermore, many of the people that we spoke to recommended that students work on research projects with multiple faculty members so that they can gain exposure to a variety of areas within I-O psychology. Such broadened exposure should help students become more well-rounded researchers and identify which topics are most aligned with their interests. Dr. Rutigliano also suggested that students should reach out to researchers at other institutions so that they can expand their networks and engage in highly collaborative projects. In terms of publishing, the consensus was that students should have at least 2–3 publications by their 5th year of a doctoral program and perhaps a few additional articles in progress or under review. Dr. Shockley recommended that students should immerse themselves in a variety of research projects early on and see them through to publication. This way, they can become well-versed in all aspects of the research project and start to learn more about what aspects of the process they find most engaging. Dr. Grandey emphasized the importance of publishing one’s thesis or first-year research project. She noted that this can be a great way for students to ease themselves into the publication process and that the paper does not necessarily have to go to a top-tier journal as long as the student is the first author.

After teaching, research, and publishing, the three most frequently raised suggestions were for students to present their research at academic conferences such as those held by SIOP and the Academy of Management, to develop their skills in advanced statistical analysis, and to gain experience working on research and travel grants. Each of these experiences should make students more competitive candidates on the academic job market.

Important Tips for Preparing for a Career in Practice

One of the biggest questions that students often have in graduate school is how they can gain exposure to the applied side of the field. Although some graduate programs have built-in practicums and required internships, this is certainly not the norm. Without the institution's direct help, it may be difficult for students to find appropriate applied experiences that will not interfere with their coursework. This is why we made sure to ask the professionals about how to identify the right opportunities.

Several of the professionals suggested that students start by speaking to professors about their applied interests. Many professors have extensive experience in the field of I-O psychology and may be able to offer connections. Both Dr. Ruggeberg and Dr. Islam noted that these types of connections can be a great way to get involved in short-term consulting opportunities. Dr. Goldstein suggested that another easy way to learn about the applied world is to read business publications (e.g., *Forbes*, *Fortune*, *Harvard Business Review*). These journals can help students pick up business acumen and learn about key business trends, both of which are useful for when students go on the job market. Dr. Vasilatos and Dr. Islam also recommended that students get involved in local professional organizations, such as the Metropolitan New York Association for Applied Psychology (METRO) and the Society for Human Resource Management. Through these organizations, students can network with practitioners, learn more about the work they are involved in, and perhaps get opportunities to work with them on small projects.

Furthermore, each of the professionals stressed the importance of pursuing internships so that students can get hands-on experience with applied work. Ms. Champine was passionate about how valuable these experiences can be. She also recommended that students get involved in a variety of different projects during their internships so that they can determine which parts of the field are most aligned with their interests. Dr. Rutigliano echoed the same sentiment by saying that it is "far more important to get any experience than necessarily the 'right' experience." Students should be open to a wide variety of opportunities, as they will never know what they enjoy until they have tried it.

The professionals also provided some recommendations about when students should start to pursue internships. Some recommended that students start this search early so that by the time they are ready to hit the job market they have clearer interests and more refined skill sets. Others recommended that students hold off until they have more coursework under their belts, because students may need this knowledge to excel in their internships. However, the most consistent piece of advice was that students should not pursue internships if they believe that it will interfere with their academic progress (e.g., finishing coursework, taking comprehensive exams, defending independent research projects).

Conclusion

Planning one's career during graduate school is no easy task. With coursework, research, and teaching requirements already on their plates, it may be difficult for I-O graduate students to find the time and energy to think ahead toward their careers. Our goal with this column was to make the career planning process seem a bit easier and less nerve wracking by providing a variety of recommendations from experts in the field. In particular, the professionals recommended that students start to think about their careers early on in graduate school, keep an open mind about both academic and applied career paths, do their due diligence about what certain jobs actually look like in the real world, and pursue a variety of developmental experiences that will prepare them for multiple career paths. They also suggested that students interested in academia should focus heavily on research, publishing, presenting, and teaching, whereas students interested in practice should pursue the same experiences, as well as applied projects and internships. Overall, we hope that this information will help I-O graduate students feel confident in their abilities to plan their careers and make informed career decisions down the line.

We would like to thank our contributors for their willingness to participate and the advice they shared with our readers.

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The I-Opener: What Do You Want To Be When You Grow Up?



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Let's do an exercise: think back to your graduate school days and to those who graduated with you; or, if you're still enjoying the graduate life, think about the alumni that you have met from your program. Now, did all of these individuals go into practice? Did they all go into academia? For most PhD programs, we would guess that the answer to both of these questions is "no"; rather, graduates likely pursued a mixture of both of these career paths. Now think about the program itself. Was it focused more on the practical aspects of I-O consulting—on planning and executing projects, on interacting with various stakeholders, and so on? Or was it more research focused, concentrating on I-O theory and a variety of advanced statistical techniques? Or was it a fairly even offering of the two, equipping students with either (or both!) skillsets? Now here's the kicker: Did you know, going in, what this focus was? If so, to what extent did that influence your decision to attend that program? If not, would you have changed your decision having had this information?

We (the authors) have had exposure to a number of graduates from different programs at the PhD and master's level as a result of, variously, our own training, our work in academia, and our work in industry.¹ In speaking with many of these individuals, we think that we've noticed a trend: Answers to the above questions vary across people, and many seem to be confused about the focus of their program.

Although in theory all of the graduate programs are reading from the same playbook, we don't think it contentious to state that different graduate programs equip students differently for given career paths (see <http://www.siop.org/CareerPaths/> for more information about those paths). Some programs focus more on practitioner-oriented activities, such as running consulting firms within the program or partnering with local industries to establish internship opportunities. Others are more research-focused, having very active research laboratories (and for the lucky few, grants to pay for research assistantships). Is that to say that programs can't do both? No, of course not. But certain resources being in finite supply (time, if nothing else, of faculty and students), ultimately graduate programs have to make decisions about where to allocate these resources. In our view, this is okay as long as the programs are honest with themselves and their students about what their focus is.

To that end, we sought some perspectives from thinkers across various areas of the I-O world to help us expand and refine these thoughts, and we have wrapped all of our conversations and musings into this package,² in which we aim to provide some recommendations for action to those who steer graduate programs and those who aim to participate in them.³

Some Foundational Assumptions/Observations

Take a look again at those career paths linked above. Focus especially on the top competencies and experiences associated with each of the four categories (academia, consulting, government, and industry). There are some commonalities (especially in terms of competencies), and perhaps we're accentuating the differences, but goodness—did your graduate program prepare you for entry into each of those four contexts? Did it prepare you for any of them? The assumption/observation here is that, despite there being only one [O*NET entry](#) for industrial-organizational psychologists, different I-O folks have starkly different jobs with starkly different requirements.⁴

Admittedly experience is something accumulated over time and may be acquired after achieving an entry-level position, but read over those pages. When you emerged from your graduate program, were you even in the ballpark of all four of those domains? Did you kill it on one of them and could kind of pass muster on others? For a variety of reasons, programs cover all of these bases to a greater or lesser extent. Some may try to fully cover all, though the extent to which they are able to do so is unclear; the recent [Rankings project](#), however, can be used to examine just how some programs are succeeding in some areas and not in others. Should graduate programs try to be masters of all domains? Is that possible?⁵ There may be tradeoffs inherent in trying to realize full-spectrum career preparation for students—in time, difficulty, probability of success, and then of course just the point that *perhaps students don't need to be prepared for all four of these domains*.

Students Need to Be Critical Consumers of Graduate Programs

As one of our interviewees noted, applicants who are deciding to pursue a graduate education in I-O psychology first need to critically examine why it is they want to be an I-O psychologist. This self-reflection should preempt any decision of whether one wants to pursue a career in practice versus research, as ultimately it will be the driver behind that decision. With this information in one's pocket, an applicant can then begin to explore the learning opportunities that are out there and how these can fit in with his/her overall objectives, and then finally how these opportunities may shape career trajectories. This is not to say that students in a consulting-oriented program cannot become academics nor that those in research-intensive programs cannot work in government, it just means they will need to work harder to achieve these ends. Having frank conversations about this upon entry as well as throughout the student's time in the program, including periodic reviews of whether a student's developing career objectives will be best served by their present or by another graduate program, should be the default in the student experience.

Many of the individuals from whom we solicited opinions agreed that it is the responsibility of graduate applicants to do their due diligence in selecting the program that best fits their educational goals. Many students, however, start graduate school without a clear idea of where they want to arrive in terms of careers, which throws a wrench in the above to some extent. But students *should* have an awareness that the focus of their program will have consequences for their career path.

So how do we accomplish this? How can we make sure that applicants are aware of the impact their choice of program has on their future ambitions? Given the noted unpreparedness of many undergraduates to make such decisions, and also that the readership of this article most likely tilts more heavily toward those already in the field, we focus our recommendations on steps that graduate programs can take rather than placing the burden solely on the applicants.

Suggestion 1: Programs Must *Identify* What Their Focus Is—and Double Down

Graduate programs are guided in large part by their faculty, and their faculty may not be interested in or capable of providing the experiences necessary to prepare their students for all four the career domains discussed above. Faculty have preferences for the work upon which they focus, and tenured faculty have the luxury of, at their discretion, single-mindedly pursuing that focus. Whether it is research or practice or teaching or advocacy or administration, many faculty give themselves over wholly to their passions. Although this is admirable, we recommend that they be cognizant of what this focus is and ask themselves how they can best leverage these pursuits to aid in the development of their students. Some of these foci may be much harder to reconcile with training graduate students; although we recognize that serving graduate students is not the sole purpose of faculty, those who can do so should ask themselves how they can best do so, and those who cannot might want to consider whether they should (and could) pass these responsibilities onto others.

If such a process is followed, a program may find (or may have already found) that it has substantial deficiencies in, for example, preparing students for government jobs (due, perhaps, to a complete lack of contacts in government, general research focus rather than practice focus, or the like) but great strengths in preparing academics who can crank out research articles and grant proposals. Great! Focus identified. Now stop giving them half-hearted developmental opportunities for an applied career. Make them academics. Oh, make them conversant in practice, sure, but don't pretend that this individual will be equipped for a practitioner role after graduation.

If, instead of the academic focus, you find that consulting and industry are your strong suit, great! Same idea. Teach your folks how to use research and how to collaborate with researchers, then get to what you do best: getting them practical skills and industry experience through internships, collaborations with business departments, whatever!

This may mean some important restructuring of personnel within programs, and we recognize that that's a more difficult task than we may be intimating. Perhaps programs have two foci and can get away with that given their current loadout of faculty and resources, but we would guess that most programs don't have the resources to provide their students with two completely separate educational experiences. This bifurcation of "practitioner" versus "academic" focus comes largely from the fact that the amount of information available in the field has far surpassed the level of knowledge that any one individual can be reasonably expected to bring to bear. As one of our contributors suggested, we should ask whether the scientist-practitioner model in which one is expected to be deeply knowledgeable about both research and practice is serving us as well today as it once did. We're not arguing⁶ that there isn't some central core of I-O training that should be common to all of us,⁷ just that the have-cake-and-eat-it approach that some programs use isn't serving anyone well—not the faculty, not the reputation of the program, and not the students enrolled in it. Relatedly:

Suggestion 2: Programs Should *Convey* What Their Focus Is

Once a program has identified and retooled itself in light of its focus/niche, it needs to have the courage to own that publicly. It should make explicit to all applicants what the focus of the program and its curriculum is, and what implications this has for a student's career prospects. The program may need to fight at the departmental/college/university level to be permitted to call a spade a spade as it may affect the program's applicant pool/acceptance rates adversely to cut out entire segments of students (those interested in career paths that are not addressed by the program); however, it also has the possibility of improving one of the primary metrics by which graduate departments measure themselves: graduation rates.

Establishing a common language by which to convey a program's focus will not be a small matter, not because such a language isn't already readily available (see the career paths, for instance) but because programs may be resistant to publish the message "hey, you're not going to get applied experience here; if you want to be a consultant, look elsewhere." But it is essential that such a common language be chosen and deployed, because it serves no one to have students enroll in a program only to find that they can't (or will have an uphill struggle to) get to their target career via the program in which they are involved.

Ok, you might say, "I'm a faculty member, and I agree with what you say (let's pretend), but I can't actually make these kinds of programmatic changes; what can I do?" Presumably you have contact with your students prior to their acceptance—either through emails, interviews, or a visit day—yes? Take these opportunities to discuss with the applicants, first, how important it is that they choose a program that aligns with their career aspirations, and second, how your program will prepare them to meet these objectives. Hopefully these discussions will reinforce the applicants' decisions to attend your program; if not, then count yourself lucky that you didn't dedicate a good portion of your life to training a researcher who ends up getting an applied job and not finishing their dissertation.

In Closing

Though it's easy to say that students need to own their graduate school/career trajectory, we ought to reflect on how we as a field can help them to do so. Many of us (the second author included) didn't have, at the point at which we're applying to a graduate program, the knowledge required to formulate, let alone answer, the question of what careers (a) exist in our field in general and (b) are likely to be open to us following the completion of a specific graduate program. Undergraduate students are not, in general, sufficiently conversant in the diversity of our field to apprehend the potential impact of their choice of a specific graduate program on the rest of their work life. So what is to be done? Do we train potential applicants to understand this impact? Do we push toward an aggressive policy of communicating, in a common and broadly respectful language, exactly what a particular graduate program can and can't do for a student? Yes to both, we say.

Notes

¹ We do not mean to imply an incredibly large network of such individuals. Just the normal amount.

² With apologies to our contributors, **Ernest Paskey**, **Rosemary Hays-Thomas**, **Joel Lefkowitz**, and **Neil Morelli**, for any instance in which we twisted their words to our purposes.

³ If you know someone who aims to participate in an I-O graduate program, please direct them to this article; they likely won't see it otherwise—at least not until it is too late to matter. Thanks!

⁴ Which is not to say that there aren't greater differences between I-Os and, say, baristas than there are between any two I-Os, but the differences are there nonetheless.

⁵ Our intention is not to debate this point in this article. If you'd like to have such a debate, please feel free to corner us at the next SIOP conference.

⁶ Though others have: the discussion at "The Great I-O Psychology Practice Debates: Addressing Critical Professional Issues" at Annual 2018 was pretty interesting in this regard.

⁷ See, for example, the training guidelines: <http://www.siop.org/ETguidelines.aspx>

he Uniform Guidelines on Employment Selection Procedures, on the Occasion of the *Guidelines*' 40th Anniversary

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No one who works with tests and other employment practices wants their employer to be sued because of a discriminatory practice, so their acting to mitigate potential employer liability is part of their job, even if not explicitly stated in a job description. So, how a practice, such as test use, hiring or compensation, can be challenged as illegal, and the applicable standard under which a claim could happen, should be common knowledge.

Not always, and what we know, or think we know, can be confounded by at least some misinformation. For instance, discrimination doesn't have to be intentional. It can be, sure, but in every testing discrimination claim involving the *Uniform Guidelines on Employment Selection Procedures* (1978) and in many claims brought under *Title VII of the Civil Rights Act of 1991* (1991), no intentional discrimination is alleged at all. Each claim was identified statistically based on the test or other employment practice having caused adverse impact—that one or more demographic groups were underselected, paid less, or otherwise disadvantaged at a substantially higher rate than the top performing group as a result employer use of the practice. So, an employer can go out of their way to treat all candidates, employees, or examinees equally and still be held liable under the disparate impact theory of discrimination.

The *Uniform Guidelines* is especially prone to myth and misinformation. It's a legal standard, that's true. Although the *Guidelines* is not federal law, it is still routinely enforced for discrimination—and with the full force and effect of law, that's also true, just as if the *Guidelines* was law. But, the *Guidelines* is enforced only against Federal contractors found to have discriminated on the contract, not against all employers, and enforced only by the U. S. Labor Department's Office of Federal Contract Compliance Programs (OFCCP).

The point is that too many employers, and the supposed experts retained to advise those employers, aren't always sure of how a test or practice can be illegal, or how the *Uniform Guidelines* fits in, or if it does, or even what the *Guidelines* is. Others seek legal defensibility by acting on at least some myth, which is a problem because you don't know it's myth you're relying on. Let's review the *Guidelines* and how a practice can be challenged as illegal while debunking some of the more common myths along the way to finally put a particular myth to rest.

Maybe. Hopefully.

The Supreme Court Introduces Disparate Impact Theory

The *Civil Rights Act of 1964* first made it illegal for employers to discriminate on the basis of traits such as race, religion, color and gender, which created the so-called disparate treatment theory of discrimination. Then came *Griggs v. Duke Power Company* (1971) and the Supreme Court introducing the disparate impact theory of discrimination as the second way to challenge an employment practice.

To put *Griggs* in context, many employers had a long history of discrimination. Duke Power, for instance, kept Blacks in labor jobs, which paid the least. After the *1964 Civil Rights Act* made intentional discrimination illegal, Duke required non-labor job candidates to have a high school diploma and to pass two general intelligence tests. Anyone could compete for any job, but the three requirements acted to still keep Blacks out of the higher-paying non-labor jobs, so Willie Boyd and 14 other Black laborers sued under *Title VII of the 1964 Civil Rights Act*. The plaintiffs then picked Willie Griggs as lead plaintiff, because he was the youngest member of the group and thus had the most to gain from a favorable ruling.

And that's what happened. Several district and appeals court decisions later, the Supreme Court held that a practice with adverse impact was illegal under *Title VII* unless the practice is shown to "measure the person for the job and not the person in the abstract." In other words, a test which adversely impacts Black examinees as a group, for instance, is discriminatory unless the employer can then show that the test is job related and consistent with business necessity (i.e., valid):

The (1964 Civil Rights) Act proscribes not only overt discrimination, but also practices that are fair in form, but discriminatory in operation . . . (G)ood intent or absence of discriminatory intent does not redeem employment procedures or testing mechanisms that operate as built-in headwinds for minority groups and are unrelated to measuring job capability.(Griggs v. Duke Power, 1971)

Griggs is noteworthy for having introduced disparate impact theory, which requires no employer intent to discriminate, and because the Court awarded "great deference" to the *Guidelines* in the decision—actually, to the then-version of the *Guidelines* EEOC (1970, 1966) had written and was using at the time. Great deference directs the courts to defer to the *Guidelines* when assessing validation of the challenged exam, direction, which the Court affirmed in *Albemarle Paper v. Moody* (1975). So, federal courts reference the *Guidelines* in a *Title VII* claim involving a test to show how they assessed validity but decide the case based on *Title VII* law.

Willie Griggs' involvement in the case made him a civil rights icon. No one ever heard of Willie Boyd.

The Federal Enforcement Agencies Issue the *Uniform Guidelines*

In response to *Griggs*, the four federal enforcement agencies—the EEOC, U. S. Civil Service Commission, which since rebranded as OPM, and the U. S. Departments of Justice and Labor—separately issued their own standards to remedy discrimination. The result was sporadic enforcement, probably not surprising because each agency was applying their own standards, and no agency had actual authority to compel compliance or remedy any discrimination. The four agencies came together in 1978 to co-issue the *Guidelines* to operationalize the disparate impact theory of discrimination introduced in *Griggs*.

Still, none of the agencies could enforce the *Guidelines*. The U. S. Labor Department then stepped forward to legally adopt the *Guidelines* to administer *Executive Order 11246* (1965), which had made discriminating in federal contracting illegal. The Labor Department already had legal authority to enforce discrimination on federal contracts from the *Executive Order 11246*, which had created the Department's Office of Federal Contract Compliance Programs. What *EO 11246* didn't provide was an enforcement standard, so OFCCP went through the process detailed in the *Administrative Procedure Act* (1946) to accept the *Guidelines* as that standard.

Federal agencies routinely go through the process to issue regulations as binding to help that agency implement federal laws specific to the agency. The proposed regulation becomes binding on the population the agency had preexisting legal authority to regulate, with the agency then able to enforce the now binding regulation against that population for violations. To do that, OFCCP (or any federal agency seeking to formally adopt regulations as binding) advertised the proposed regulation in the *Federal Register*, allowed time for public comments, and then incorporated those comments into the final regulation. For OFCCP, that population is "covered" federal contractors. A covered contractor has more than 50 employees and holds a contract or subcontract worth at least \$50,000.

When enforcing laws against discrimination, OFCCP cites the particular discrimination found that violate *41 CFR 60-3*, which is where the *Guidelines* is cited in the *Code of Federal Regulations*. The *CFR* contains the full set of binding regulations; it is the *U. S. Code* which contains federal laws.

How a Plaintiff Builds a Disparate Impact Claim

Under the *Guidelines* or *Title VII*, which makes the very same disparate impact discrimination unlawful against all employers as does the *Guidelines*, which is enforceable only against federal contractors, a plaintiff makes a “prima facie” showing that a test or employment practice caused adverse impact against a group like women or Blacks. In a *Guidelines* claim against a federal contractor, that plaintiff can only be OFCCP. Adverse impact doesn’t mean the test or practice is illegal. Not at all. It’s just the initial statistical indicator that discrimination has happened “on its face,” which is what prima facie means.

The burden then shifts to the employer to defend the claim, which requires the employer to “justify” use of the test by showing acceptable validation through any of the four local validation strategies contained in the *Guidelines*: criterion-related (*Guidelines 15.B.9.*), content (*Guidelines 15.C.6.*), and construct validity (*Guidelines 15.D.8.*), or by transporting existing validity of the subject test across users (*Guidelines 7.B.*). Some employers use multiple strategies to show the challenged test is valid. That’s fine, as long as validity is acceptably shown using at least one *Guidelines* strategy.

Should the employer provide acceptable validation—and “acceptable” is always open to dispute in any adversarial proceeding given the central importance of validity to both sides in a disparate impact claim—the burden then shifts back to the plaintiff. To prevail, the plaintiff must then offer a suitable alternative that the employer declined to use in favor of using the higher-impact test being challenged. At least, in theory, because case law on suitable alternatives is essentially nil.

A plaintiff *not* able to offer a suitable alternative loses their case right there. A test the employer *can* successfully defend is legal and can continue to be used, despite the test’s adverse impact or degree of impact. A test that the employer *cannot* justify is discriminatory, which happens more than you’d think, which is surprising given the value of validity to any assessment: “The employer is then liable for monetary damages to compensate those screened out by the illegal practice.

In reality, an employer facing a disparate impact challenge first responds by vigorously attacking plaintiff statistical analyses, offering alternative statistics and analyses to make adverse impact go away: No adverse impact, no disparate impact claim. Employers also routinely retain psychometric experts to help convince OFCCP, or a private plaintiff in a *Title VII* claim, that validation is acceptable technically. When inequitable hiring or compensation is alleged, employers similarly try to make the adverse impact go away, while working to attribute the significant hiring or pay difference to intervening variables like education, experience, bad plaintiff data or inappropriate analyses, rather than to discrimination.

The Disparate Treatment Theory of Discrimination

A disparate *impact* claim centers on the unintended discriminatory consequences of employer use of the challenged practice based on the practice having caused adverse impact. In contrast, a disparate *treatment* claim alleges intentional discrimination, as in *Ricci v. DeStafano* (2009). In *Ricci*, the City of New Haven feared a disparate impact claim and the associated bad press when no Black examinees scored high enough to be promoted, so they simply voided all results. Ricci and his co-plaintiffs, each of whom would have been promoted based on their test scores, then sued under *Title VII*. The issue before the Court was whether an employer could discriminate against one group to avoid discriminating against another group.

The Supreme Court eventually said no, but by a 5–4 margin in a case that would seem to be a very clear instance of intentional discrimination based on examinee race. Chief Justice Roberts nicely summarized the issue during oral arguments by asking defense counsel if the city would have tossed out everyone’s results if no Whites had passed.

To Investigate or Not Investigate Suitable Alternatives

One of the more common, let's debunk this myth in its own section.

When a test causes adverse impact, the *Guidelines* require the employer to then justify test use by showing: (i) acceptable validation (*Guidelines 3.A.*) for the test, and (ii) that suitable alternatives were investigated as part of that validation (*Guidelines 3.B.*). The *Guidelines* consider the latter so essential that validation is *not* acceptable on that basis, alone, and the challenged test discriminatory unless the employer investigated suitable alternatives, psychometric evidence aside.

Aamodt (2016) advises accordingly: "Did the employer search for alternatives with equal validity but less adverse impact? . . . If a selection procedure results in adverse impact, but is found to be job related, the *Uniform Guidelines* still requires employers to search for an alternative method that would have equal validity but less adverse impact." In brief, a valid test for which no suitable alternatives. Attorney Santiago (2008) similarly notes that: "Ultimately, each employer is responsible for . . . considering suitable alternatives which may lessen any disparate impact." In their extensive discussion specifically focusing on the kinds of alternatives that could be considered as suitable under *Guidelines 3.B.*, Sady, Dunleavy and Aamodt (2013) state that:

it is incumbent on the employer to . . . (b) evaluate the availability of alternative selection procedures that are equally valid for the intended purpose and result in lower adverse impact. As the UGSEP (3.B.) state

Not necessarily so. It is test validation, alone, that justifies use of the challenged test because no employer has any legal requirement to consider suitable alternatives; at no point in the burden-shifting process in a disparate impact claim is the employer required to proffer a lower impact alternative. That's the *plaintiff's* burden to win the challenge, should the employer justify exam use of the subject exam. That was clear from the start in cases like *Albemarle* (1975), which predates the *Guidelines*, and in consistent post-1978 case law. Congress then acted accordingly to codify in federal law, the *Civil Rights Act of 1991*, that the suitable alternatives requirement rests on the plaintiff. (The suitable alternatives issue is irrelevant in a *Title VII* disparate treatment claim.)

The legal requirement aside, employers should act to lessen assessment adverse impact to promote test fairness. That's good psychometric practice. Test developers routinely consider item difficulty, differential functioning, item discrimination and distractor analysis, and use multiple steps to refine and field test draft items, to have an item pool sufficient to construct a valid exam with desired psychometric properties, including minimizing adverse impact. In the same vein, validity is a psychometric requirement, not a legal one; validity is required legally only to justify use of a test with adverse impact.

The *Guidelines* Can Be Updated, But Won't Be

A final word. The *Guidelines* provides that "New strategies for showing the validity of selection procedures will be evaluated as they become accepted by the psychological profession" (*Guidelines 5.A.*). Again, in theory, because I doubt the *Guidelines* will ever be revised in practice or that there is a pressing need. Advocates of validity generalization, though, including employment lawyers such as Copus (2006), are especially vocal in their demand that OFCCP allow VG theory under the *Guidelines*. VG holds that cognitive measure is inherently valid across jobs and job settings (Schmidt and Hunter, 2003) without need for local validation. Under VG theory, there is no need to justify use of any cognitive test because such tests are already, automatically valid, as shown by meta-analysis. So, VG, they claim, would have been included in the *Guidelines* as the fifth acceptable strategy had it been more fully developed in 1978.

OFCCP has legal authority to enforce the *Guidelines* but no authority to change or deviate from the *Guidelines*, so the agency continues to reject VG. Rightly so, because no federal court has ever accepted VG in any of the

many *Title VII* claims in which it has been offered; after hearing evidence from VG experts in each case, courts across circuits have then rejected VG as acceptable each and every time. Local test validation is here to stay to justify challenged test use, whether in a claim brought by OFCCP under the very same *Guidelines* that was issued in 1978 or in a private plaintiff's *Title VII* claim. At least, until a federal court accepts VG, and that will never happen, either.

References

- Aamodt, M. (2016). Conducting background checks for employment selection. *SHRM-SIOP Science of Human Resources Series*. Alexandria, VA: Society for Human Resources Management.
- Administrative Procedure Act* (1946). *Public Law 79-404* (contained in *Title 5* of the *U. S. Code* starting at Section 500; enacted June 11, 1946).
- Albamarle Paper v. Moody* (1975). 422 U. S. 405, 425.
- Civil Rights Act of 1964* (1964). Public Law 88-352; 78 Stat. 241.
- Copus, David (2006). *An Open Letter Challenging OFCCP on Ability Tests* (April, 2006). Morristown, NJ office: Ogletree Deakins Law Firm.
- EEOC (1966). *Guidelines on Employment Selection Procedures*. Washington, DC: Equal Employment Opportunity Commission.
- EEOC (1970). *Guidelines on Employee Selection Procedures*. 35 *Federal Register* 12, 333-12,336.
- Executive Order 11246* (1965). Signed September 24, 1965 (revised January 4, 2002).
- Griggs v. Duke Power Company* (1971). 401 U.S. 424.
- Ricci v. DeStafano* (2009). 557 U.S. 55.
- Sady, K., Dunleavy, E., and Aamodt, M. (2013). UGESP Series Post #5: Suitable alternatives and reasonable effort: What is an alternative and what is reasonable? Washington, DC: DCI Consulting.
- Santiago, L.A. (2008). Employment tests and selection procedures: Are you following EEOC's best practices? *Holland and Knight Labor, Employment and Benefits Information Sheet*. New York, NY: Law Firm of Holland and Knight.
- Schmidt, F.L. and Hunter, J.E. (2003). History, development, evolution and impact of validity generalization and meta-analysis methods. In K.R. Murphy (Editor), *Validity generalization: a critical review* (pp. 288-350). Erlbaum: Mahwah, NJ.
- Uniform Guidelines on Employment Selection Procedures* (1978). *Federal Register*, 43 (August 25, 1978), pp. 38290-38315; *Code of Federal Regulations*, 41 CFR 60-3



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Changing Face of Diversity: A Discussion of the U.S. Census and Its Implications

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At a recruiting event for my organization, I (Bharati) was approached by a job applicant. With the demographic information section of the application in hand, she asked, “I am half White and half Black. Which box should I check? Both boxes for White/Caucasian American and Black/African American, or just the one that says “Other?” This confusion reflects a larger national discussion in the U.S. regarding the definition of the “Other” category: does it mean “multiracial,” “none of the above,” both, or something else? Although pertinent to all people and institutions within this country (and any others with diverse population), this question is particularly relevant to I-O psychologists, as the science and practice of our field makes demographic reporting important. In our opinion, we have not done the best job of keeping up with how demographic changes in the U.S. reflect how we capture the race/ethnicity of people within organizations.

In this article, we attempt to initiate a broader conversation on this topic within our field. We contend that as the makeup of our country continues to change, this conversation will need to be ongoing to ensure accuracy in how we survey demographic characteristics. As a start, we thought that considering how race and ethnicity have been defined and captured in the U.S. Census over time would be useful. The U.S. Census plays a large role in capturing the demographics of this nation, and its decisions around how people are “categorized” can influence the ways other institutions choose to do so. Therefore, we also contemplate what the Census’ categorizations mean for organizations, and for I-O research/practice.

Race Defined in General and by the U.S. Census

The concept of race/ethnicity in the U.S. is complex and difficult to define, resulting in inconsistent meanings and understanding (Chavez & Guido-DiBrito, 1999). Although race is popularly considered a biological construct that is derived from one’s physical characteristics and gene pool (Spickard, 1992), researchers have recognized its social dimension that includes “a sense of group or collective identity based on one’s perception that he or she shares a common heritage with a particular racial group” (Helms, 1993; p. 3). After all, genetic differences within humans are not large enough to support the notion of racial groups.¹ Race can be more easily defined as a social construction rooted in historical and anthropological context, and should be considered a social categorization based on phenotypic characteristics to which society attaches importance (Omi & Winant, 2014). Whereas the concept of race has both biological and social components, ethnicity is a purely social construct, regarded as a collection of cultural traditions, behaviors, values, and beliefs of a group one belongs to or identifies with (Waters, 1990). Due to the overlap in their definitions, these distinct yet related constructs (*c.f.* Helms & Talleyrand, 1997; Phinney, 1996) are sometimes used interchangeably. On the other hand, the U.S. Census Bureau defines race and ethnicity as “a complex mix of one’s family and social environment, historical or socio-political constructs, personal experience, context, and many other immeasurable factors.” Given this definition, a person’s racial or ethnic self-identification can change over time and across contexts (Liebler, Porter, Fernandez, Noon, & Ennis, 2017).

Currently, the U.S. Census Bureau classifies responses to the race question into White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. According to the Census Bureau’s 2017 annual estimate of the resident population, among the non-Hispanic/Latinx population, 5.6% of the people in the U.S. identified themselves as Asians, 0.7% as American Indian and Alaska Native, 12.5%

as Black or African American, 0.2% as Native Hawaiian or Other Pacific Islander, and 60.7% as White (U.S. Census Bureau, 2017). Across racial groups, 18.1% identified as Hispanic/Latinx² (U.S. Census Bureau, 2017). Additionally, the U.S. immigrant minority has increased from 9.6 million in 1965 to a record 45 million in 2015, pushing this country's foreign-born share to nearly 14% of the total population. Going by these statistics, we can safely say that racial/ethnic *minorities* together are on track to make up the *majority* of the U.S. population. In fact, according to the U.S. Census population projections (U.S. Census Bureau, 2018a), the non-Hispanic White population is going to shrink, making these minority groups a larger fraction of the U.S. population by 2060.

In conclusion, it will be interesting to see how the upcoming 2020 Decennial Census turns out and how these figures translate into labor-force participation. These demographic changes are important to monitor due to the implications they have not only for the Census (to provide accurate representation of the U.S. population³) but also for organizations (that are generally mandated to account for their workforce demographics). We walk through a few of the changes and provide suggestions for organizations below.

Some Other Race (SOR) Category: A Solution or a Problem?

A growing percentage of U.S. Americans do not select a race category provided on the form. Instead, they select the SOR category, which first entered the form as simply "Other" in 1910. According to the 2010 Census, as many as 6.2% of Census respondents selected only the SOR category to identify themselves. In fact, in 2000 and 2010, the SOR population was the third largest race group.⁴ Mathematically, this proportion results in millions of people unaccounted for every 10 years. If nothing is done ahead of the 2020 Census, this category could become the second-largest racial group in the U.S. (Ashok, 2016).

The U.S. Census Bureau recognized that racial categories have changed extensively through the decades and intended to improve the accuracy and reliability of its race and ethnicity data through a research project. This project (also known as the *Alternate Questionnaire Experiment*) tested different questionnaire-design strategies for the upcoming 2020 Census (U.S. Census Bureau, 2012a). As a result, changes were proposed to update the outdated terminology.

The Office of Management Budget (OMB)'s *Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity* (OMB Statistical Directive 15, 2017) describes the racial and ethnic categories that we have come to see on nearly every government form. Fairly recently, efforts were made to update these categories in advance of the 2020 Decennial Census due to the increased usage of the SOR category in data collected by the Census over the years. Last year, a combined question format for Hispanics/Latinx was proposed as they generally view their ethnicity as race, as well as a new category named *Middle Eastern and North African* (MENA) for inclusion in the 2020 Census (U.S. Census, 2018b). However, these changes will not be implemented.⁵ This failure to update question categories to represent how people racially and ethnically identify themselves could result in overuse of the SOR category and impact respondents' willingness to report their race/ethnicity. It may be that people choose the SOR category because they do not agree with the category options that are provided.⁶ Moreover, we suspect that this decision is a step back from reaching an accurate count of this country's demographics. Generally, a thorough and correct calculation of a population's demographic makeup is useful for developing policies that benefit the community at the local level.

Other than the unavailability of more appropriate categories, the overuse of SOR category could also be due to legitimate concerns over data privacy/confidentiality. In small geographic areas, one's response to the Census might identify someone; this perhaps may encourage some individuals to choose the appropriate response instead of SOR. That said, the U.S. Census Bureau will continue its research into strategies for the collection of more accurate race and ethnicity data. To address this, the U.S. government can do a better job of informing everyone that the U.S. Census Bureau keeps personal information confidential (U.S. Code, Title 13) even from other federal agencies or law enforcement entities.

What Should Organizations Do About This Issue?

Agencies, including the Equal Employment Opportunity Commission (EEOC), are required to follow the regulation issued by the OMB for reporting race and ethnicity categories. This means that the OMB's recommended changes to help reduce use of the SOR category described above would have also been relevant to how organizations collect demographic data from their employees. We spoke to SIOP member **Romella El Kharzazi** (RE),⁷ PhD, SHRM-SCP about the issue of the overused SOR category and about potential solutions to the issue of missing/incorrect collection and reporting of employees' race and ethnicity data by employers. She explains:

Employers with 100 or more employees or federal government contractors and first-tier subcontractors with 50 or more employees and at least \$50,000 in contracts must file an EEO-1 Survey annually. The EEO-1 requires a complete accounting of an employer's workforce. If an employee has decided not to volunteer their personal data, an employer may make a visual assignment [29 C.F.R. § 1602.13]. Obviously, it is preferable for employees to provide their own racial and ethnic information, instead of an employer relying upon potentially inaccurate visual assessments. (personal communication, July 7, 2018)

The EEO-1 filing requirement has implications for the work that organizations do around equity, diversity, and inclusion, and helps to ensure they do not violate *Title VII of the Civil Rights Act of 1964 (Amended 1991)*. Thus, to increase accuracy to the best extent possible, employers should give employees the regular opportunity to update their demographic data, as self-identification can change (Liebler, Rastogi, Fernandez, Noon, & Ennis, 2014). This also helps mitigate the problem of missing demographic information.⁷ It would also be important to discourage organizations from making unethical discretionary decisions about the racial/ethnic classification of their employees (e.g., incorrectly reporting a multiracial employee as a minority without consent with the intent of reporting a higher proportion of employed minorities).⁹

To increase the accuracy of workforce demographic records, organizations may want to proactively encourage their employees to report their data and be transparent about the reasons why such data are important. For instance, they can share how accurate demographic records help determine EEOC-related compliance as well as how diversity and inclusion initiatives can be developed based on the gathered demographic information.

Generally, employees are administered a demographic questionnaire before they are hired (i.e., when they are applying to the positions); however, the ideal time to collect this info is during each employee's onboarding, eliminating missing (i.e., "do not want to disclose" category) responses from them. Keeping in mind that the racial/ethnic identity of an individual may change over a period of time (Liebler et al., 2017), including a brief demographic questionnaire in organization's employee surveys (with an option to decline self-reporting) could be another way of keeping track of and continuously updating workforce-demographic data. With all this being said, some employees may not be comfortable sharing their demographic information under any circumstances. An employer may *only then* resort to "guessing" employees' demographic membership based on observation, as Dr. Kharzazi mentioned.

Multiracial Identity and the U.S. Census

With a growing non-White population and a long history of immigration (both voluntary and involuntary), U.S. Americans are also entering into interracial relationships and marriages at an increasing rate. Last year, multiracial individuals made up 2.1% of the total population (U.S. Census Bureau, 2017). In fact, the segment of the population reporting multiple races (9 million) grew by 32% from 2000 to 2010, compared with those who reported a single race, which grew by 9.2%. (U.S. Census Bureau, 2012b). According to the 2020 to 2060 projections of the U.S. Census, the multiracial group is projected to be the fastest growing racial or ethnic group over the next several decades (U.S. Census Bureau, 2018a).

Since as early as 1860, efforts to categorize multiracial Americans have taken place. For example, the term "mulatto" (i.e., a mixed White and Black ancestry) and some categories denoting different types of Asian heritage

were included as response options in the Census questionnaire (Pew Research Center, 2015). Thereafter, despite repeatedly including multiracial categories, Census officials expressed doubts about the quality of data such categories produced and hence removed them. In the 1960 Decennial Census, enumerators categorized people, who were both White and any other race, in the minority race. People of multiracial non-White backgrounds were categorized according to their father's race (with some exceptions). In 1970, respondents were asked to mark the race with which they most closely identified from a selection of single-race categories. If they were uncertain, the race of the person's father prevailed. We must mention that this was the decade during which the U.S Supreme Court legalized interracial marriage in all states with its landmark ruling on the Loving vs. Virginia (1967) case.¹⁰ Later in 1980 and 1990, if a respondent marked more than one race category, the Census Bureau recategorized the person to a single race, usually using the race of the respondent's mother, if available.

The U.S. Census has allowed people of multiracial identity to choose more than one race category to describe their racial makeup since the 2000 Decennial Census. For the first time, individuals were presented with the option to self-identify with more than one race, and this continued with the 2010 Decennial Census. This change led to a total of 2.4% Americans identifying themselves as multiracial in the 2000 Census (Pew Research Center, 2015). Furthermore, the multiracial population increased by about one-third in size since 2000 (U.S. Census Bureau, 2011). As you can tell, attempts to record the races and ethnicities of multiracial individuals have been rather inconsistent until 2000. The Census Bureau is considering a new approach to asking U.S. residents about multiracial identity in 2020 although at this point very little is known about it.

What Does This Mean for I-O Research and Practice?

[The Race Card Project](#), started by Michael Norris in 2010, has captured peoples' observations and experiences about race into just six words. Some of these six-word stories on multiracial identity (e.g., "Yeah, but you don't look White"; "Of both worlds, belong to neither") highlight the need to explore the extent to which multiracial individuals experience discrimination at work and/or in society. It would be worth exploring the impact of multiracial identities on work processes and attitudes if we want to build a society/workplace that is more inclusive. Certainly, the multiracial identity has some bearing on I-O research and practice.

As a researcher, I (Kisha) often struggle with decisions around racial and ethnic categories; specifically, how to measure and account for bi/multiracial individuals during data collection. Currently, a biracial or multiracial category is a catch-all for multiple races and ethnicities. This could become even more challenging as multiracial groups begin to account for a larger and larger proportion of the total U.S. population. However, there may be a silver lining. Increasing numbers of multiracial individuals may allow for more specific multiracial groupings, providing us with the opportunity to better understand workplace experiences among multiracial individuals. For instance, those who identify as White and Asian and those who identify as Black and Asian can be examined separately as opposed to all of them being considered only as "multiracial."

As someone who works in the selection and assessment arena, I (Bharati) am curious as to how including multiracial options to categorize racial identity will affect certain statistical analyses (e.g., adverse impact, differential prediction) where the variable of interest is generally test taker's demographic identity (i.e., race). In these types of analyses, a group with a lower selection ratio is considered a minority group (typically a non-White demographic group). However, as the number of individuals who identify as biracial or multiracial continues to grow, I wonder what will be more appropriate: examining all biracial or multiracial candidates as one group, or separating them into their specific multiracial combinations? If I choose the latter, I further wonder the implications of sample size on the results of these analyses.

Closing Thoughts

Increasing diversity in the U.S. means that I-O scholars and practitioners should be cognizant of these changing demographic labels, be aware of the current and future challenges associated with defining race/ethnicity, and

be prepared to address the implications. We hope that the information and contemplations provided in this article will encourage some of us in our scholarly and professional pursuits.

In the introduction, we mentioned that this article is meant to start a conversation in the field of I-O psychology about how we racially/ethnically categorize people for scientific and practical purposes. These issues are also directly relevant for SIOP. For instance, during my (Kisha) time as chair of the Committee on Ethnic Minority Affairs (CEMA), I examined SIOP members' racial/ethnic group data in order to inform some of our committee initiatives. I noticed that many SIOP members have not indicated their race/ethnicity on their SIOP profiles. To encourage action, we would like to address this issue here and urge SIOP members to report their racial/ethnic identities on their profiles. These data are essential for SIOP and SIOP committees to better cater to the needs of our members.

Author Note

We would like to thank **Jason Marks** (Researcher at Amazon.com, Inc.) for his friendly review of the initial draft of this article.

Notes

- ¹ In 1942, Ashley Montagu – an anthropologist - published a book named “Man’s Most Dangerous Myth: The Fallacy of Race” arguing that race is a social concept with no genetic basis. This book is marked as one of the earliest works on debunking claims of “genetic inferiority” of other races; a series of findings have demonstrated supporting evidence.
- ² Note that The U.S. Census Bureau does not consider Hispanic/Latinx identity to be a race. Ethnicity is asked as a separate question. Census forms currently contain two questions related to race and Hispanic origin, with one asking Americans whether they are Hispanic, Latino or Spanish, and the other asking “What is this person’s race?” with checkboxes and spaces for response.
- ³ Concerns about LGBTQ representation is another example of this. The 2020 Census will ask if respondents are in same sex marriages or relationships, but will not directly ask individuals if they are lesbian, gay, bisexual, transgender, or any other sexual or gender identity. This will result in transgender, queer, and/or single LGB citizens going unaccounted for and will reduce specificity among married/partnered LGB citizens.
- ⁴ This was primarily due to reporting by Hispanics/Latinx who do not identify with any of the OMB race categories. In addition, other demographic groups, such as Afro-Caribbean and Middle Eastern or North African populations, identified themselves as SOR (U.S. Census Bureau, 2017).
- ⁵ In January 2018, the U.S. Census Bureau announced that it would not implement the changes, as the OMB did not officially revise its standards; the Bureau had run out of time to wait for possible revisions to the official OMB policy. Refer this for more information: <https://funderscommittee.org/wp-content/uploads/2018/02/FCCP-policy-update-Feb2018.pdf>
- ⁶ Thanks to the anonymous reviewer who raised this point.
- ⁷ The personal opinions expressed in this article by Dr. Romella Janene El Kharzazi are hers alone and are not reflective of any other entity. Furthermore, the opinion and any interpretations herein are not indicative of her opinion regarding any past or pending matter and should not be viewed as an indication of any future opinions that she might offer as an expert witness in EEO litigation.
- ⁸ For more information, refer to the official EEOC instruction booklet here: https://www.eeoc.gov/employers/eeo1survey/upload/instructions_form.pdf
- ⁹ Thanks again to an anonymous reviewer for bringing up this issue.
- ¹⁰ Although numbers of multiracial individuals in the U.S. appear to have increased since the 1960s, this is likely due to prior underestimates of their population size and decreased societal enforcement of the “one drop rule,” which meant that a person was considered Black if they had any African ancestry, no matter how small it was in comparison to their total makeup. This rule made it such that multiracial individuals did not always have the opportunity to self-identify, as society racially categorized them

References

Ashok, S. (2016, August 27). The rise of the American “others.” *The Atlantic*. Retrieved from <https://www.theatlantic.com/politics/archive/2016/08/the-rise-of-the-others/497690/>

- Chavez, A. F. & Guido-DiBrito, F. (1999) Racial and ethnic identity and development. *New Directions for Adult and Continuing Education*, 84(1), 39-47.
- Civil Rights Act of 1964, Pub.L. 88-352, 78 Stat. 241 (1964).
- Helms, J. E. (1993). Introduction: Review of racial identity terminology. In J. E. Helms (ed.), *Black and White racial identity: Theory, research and practice*. Westport, CT: Praeger.
- Helms, J. E., & Talleyrand, R. (1997). Race is not ethnicity. *American Psychologist*, 52, 1246-1247.
- Liebler, C. A., Porter, S. R., Fernandez, L. E., Noon, J. M., & Ennis, S. R. (2017). America's churning races: Race and ethnicity response changes between Census 2000 and the 2010 Census. *Demography*, 54(1), 259-284.
- Liebler, C. A., Rastogi, S., Fernandez, L. E., Noon, J. M., & Ennis, S. R. (2014). America's churning races: race and ethnic response changes between Census 2000 and the 2010 Census. *CARRA Working Paper*. Washington DC: Center for Administrative Records Research and Applications, US Census Bureau.
- Loving v. Virginia, 388 U.S. 1, 12 (1967).
- Montagu, A. (2001). *Man's most dangerous myth: The fallacy of race*. WAltaMira Press.
- Norris, M. (2018, May 31). *The Race Card Project*. Retrieved from <https://theracecardproject.com/>
- Office of Management and Budget Directive 15 (March 1, 2017). *Federal Register*, 82(39). Retrieved from <https://www.gpo.gov/fdsys/pkg/FR-2017-03-01/pdf/2017-03973.pdf>
- Omi, M., & Winant, H. (2014). *Racial formation in the United States* (3rd ed.). New York, NY: Routledge.
- Pew Research Center (2015, June). *Multiracial in America: Proud, Diverse, and growing in numbers*. Washington, D.C. Retrieved from <http://www.pewsocialtrends.org/2015/06/11/multiracial-in-america/>
- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist*, 51(9), 918.
- Records as to Racial or Ethnic Identity of Employees*, 29 C.F.R. § 1602.13 (1966). Washington DC: U.S. Government Publishing Office. Retrieved from <https://www.gpo.gov/fdsys/pkg/CFR-2017-title29-vol4/xml/CFR-2017-title29-vol4-part1602.xml#seqnum1602.13>
- Spickard, P. R. (1992). The illogic of American racial categories. In M.P.P. Root (ed.), *Racially mixed people in America* (p. 12-23). Thousand Oaks, California: Sage Publications.
- United States Census Bureau (2011, March). *Population distribution and change: 2000 to 2010*. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>
- United States Census Bureau (2012a, August). *Press Kit: 2010 Census race and Hispanic origin alternative questionnaire experiment*. Washington, DC: U.S. Government Printing Office. Retrieved from https://www.census.gov/newsroom/releases/archives/2010_census/press-kits/aqe.html
- United States Census Bureau (2012b, September). *Two or more races population: 2010*. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.census.gov/prod/cen2010/briefs/c2010br-13.pdf>
- U.S. Census Bureau. (2017). *Annual estimates of the resident population by sex, age, race, and Hispanic origin for the United States and States: April 1, 2010 to July 1, 2017* [Data file]. Retrieved from <http://factfinder.census.gov>
- United States Census Bureau (2018a, January 26). *Census Bureau statement on 2020 Census race and ethnicity questions*. Washington, DC: U.S. Government Printing Office. Washington, DC: U.S. Government Printing Office. Retrieved from <https://census.gov/newsroom/press-releases/2018/2020-race-questions.html>
- United States Census Bureau (2018b, March 13). *Demographic turning points for the United States: Population Projections for 2020 to 2060* (Report No. P25-1144). Washington, DC: U.S. Government Printing Office. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf
- United States Code: Title 13. *Census: Protection of confidential information*. Washington, DC: U.S. Government Printing Office.
- United States Equal Employment Opportunity Commission. (n.d.). *Fact sheet for EEO-1 survey filers*. Retrieved from https://www.eeoc.gov/employers/eo1survey/fact_sheet_filers.cfm
- United States Equal Employment Opportunity Commission. (n.d.). *EEO-1: Who must file*. Retrieved from <https://www.eeoc.gov/employers/eo1survey/whomustfile.cfm>
- Waters, M. C. (1990). *Ethnic options: Choosing identities in America*. Berkeley, CA: University of California Press.

Who Is Your Top Five? Who Hires Whom in I-O Psychology Programs?

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Acknowledgement: The authors would like to thank Dr. Tamer Desouky for his help with data collection and the design of this study

Who Hires Whom in I-O Psychology Programs?

I-O psychology is one of the fastest growing fields (Schellenberger, 2010; U.S. Bureau of Labor Statistics, 2014) of this decade, and the job of industrial organizational psychologist has been ranked the second most attractive job in science (“Industrial Organizational Psychologist Overview,” 2018). As more undergraduate students enter the field of I-O psychology, this will result in an increased demand for graduate-level degrees. With the growing influence of I-O psychology as a result of this influx, there is a need to understand from where I-O PhD programs draw their faculty. These faculty train new I-O psychology PhDs, and their training can have an effect on the course of the science (Smaldino & McElreath, 2016) and the academic life of these institutions. One way to understand how I-O psychology graduate programs grow is through an investigation of the academic origins of their faculty.

Understanding from which schools highly ranked I-O psychology PhD programs select faculty is important in several ways. First, I-O psychology is an interdisciplinary field that crosses the boundaries between psychology, business, and human resources, thus it truly “owns” selection (Rotolo et al., 2018). One would expect that the selection practices of I-O psychology programs would reflect the desire for meritocracy to which the field aspires. Second, understanding where PhD-level educators receive their I-O psychology training would be beneficial to our discipline as it has proven valuable in other STEM fields by helping in recruitment efforts for those students most inclined to academic careers (Roach & Sauermann, 2010).

Faculty hiring is especially important to any scientific endeavor. It determines the direction of the science as the faculty in Tier 1 institutions receive the most grant funding, the best PhD students, and other rewards (Flaherty, 2015; Fuerstman, & Lavertu, 2005; Tierney, 1988). There has been growing concern that faculty hiring involves closed networks where only individuals from top programs can receive tenure-track job offers. Recent findings estimate that “25% of institutions produce 71 to 86% of all tenure-track faculty” (Clauset, Arbesman, & Larremore, 2015; Warner & Clauset, 2015). This type of closed network creates a situation where most individuals in the applicant pool have limited opportunity, and this can result in poor hiring decisions. Subsequently, these hiring decisions can sometimes lead to further undesirable outcomes such as admissions gatekeepers unwilling or unaware enough to support the selection of diverse student bodies (Jaschik, 2018).

Improving the diversity of the academic job pipeline has been a concern of higher education for many years, usually focusing on women and people of color (Pell, 1996). But the need for a diversity of educational backgrounds is also a concern for these institutions (Bedeian & Feild, 1980). This need has been supported by the National Science Foundation and Institute for Education Sciences (Harvey, 2008). By de-prioritizing diversity of backgrounds, a scientific endeavor or a field may be limiting itself and its ability to discover new findings

(Fadeeva & Mochizuki, 2010; Østergaard, Timmermans, & Kristinsson, 2011). Furthermore, HRM functions within an institution can influence organizational performance (Guest, 1997). In the case of higher education, organizational performance includes research productivity (Beiler, Zimmerman, Doerr, & Clark, 2014) and the education of future PhDs and masters-level scientists and practitioners (Cassuto, 2014).. Hiring practices consequently determine rewards, grant opportunities, and other positive outcomes for graduate students and new faculty (Reese, 2014).

Given the recent calls for new I-O psychology PhD program rankings (Salter et al., 2016) and the resultant rankings from these efforts (Salter et al., 2018), the present research seeks to evaluate which institutions top I-O psychology programs hire from most often and whether this cross-disciplinary issue appears in I-O faculty hiring. We examine two exploratory research questions:

Research Question 1: From which institutions do top-ranked I-O psychology programs hire their faculty?

Research Question 2: Does the hiring source differ across ranking methodology?

Method

The researchers used the 2018 *U.S. News and World Report* Best Grad Schools in Industrial and Organizational Psychology ranking of programs, the program rankings from Salter et al. (2018), and the rankings of Beiler et al. (2014) to compile a list of school faculty. Table 1 includes the top five rankings from *U.S. News and World Report*. The next three tables include the top five rankings from Salter et al. (2018): Table 2 from Landers et al. (2018), Table 3 from Howald et al. (2018), and Table 4 from Roman et al. (2018). Table 5 includes a list of the Beiler et al.'s (2014) top five rankings. Following the methodology outlined in Emerson (2018), we gathered faculty information from these top programs through a review of their websites. For each school, full-time faculty data were collected. Faculty data included: (a) faculty name, (b) doctoral alma mater, (c) graduation year, and (d) current program. Any alma maters not found for faculty through their institution's websites were identified through the SIOP membership directory, LinkedIn, online CVs, biographies from published books, and dissertations. Although Emerson's (2018) methodology only included US-based schools, we included the University of Western Ontario, located in Canada, but we were unable to obtain data for Australia's Griffith University. Faculty were classified as recent graduates if their graduation year was 2008 or later. For each of the rankings, we sought to assess the amount of interprogram hiring, that is, what percentage of faculty at those top programs received their doctorate from another program within the same ranking.

Table 1

U.S. News and World Report (2017) Ranking

Best grad schools in industrial and organizational psychology	
1.	Michigan State University
2.	Bowling Green State University
3.	Georgia Institute of Technology
4.	University of Minnesota
5.	University of South Florida

Table 2
Landers et al. (2018) Ranking

Raw interdisciplinary publication counts	Proportion of interdisciplinary publications per publication	Raw I-O publication counts	Raw interdisciplinary citation count	Interdisciplinary impact rate	Raw I-O citation count
1. Rice University	1. Alliant International University, San Diego	1. Michigan State University	1. University of South Florida	1. Alliant International University, San Diego	1. University of South Florida
2. University of Georgia	2. Griffith University	2. University of South Florida	2. University of Western Ontario	2. Roosevelt University	2. Michigan State University
3. Clemson University	3. University of Texas at Arlington	3. University of Minnesota	3. Rice University	3. University of Texas at Arlington	3. University of Minnesota
4. University of South Florida	4. University of Nebraska at Omaha	4. Rice University	4. Michigan State University	4. Griffith University	4. Rice University
5. Michigan State University	5. Roosevelt University	5. George Mason University	5. University of Georgia	5. University of Nebraska at Omaha	5. University of Western Ontario

Table 3
Howald et al. (2018) Rankings

Teaching development opportunities	Research development opportunities	Applied development opportunities
1. Texas A&M University	1. University of Minnesota	1. Louisiana Tech University
2. University of Minnesota	2. University of Georgia	2. Pennsylvania State University
3. Northern Illinois University	3. Michigan State University	3. Roosevelt University
4. University of Georgia	4. Texas A&M University	4. The Chicago School of Professional Psychology
5. Michigan State University	5. Pennsylvania State University	5. Illinois Institute of Technology

Table 4
Roman et al. (2018) Rankings

Student perceptions	Program culture	Learn practical skills	Faculty quality
1. Portland State University	1. Old Dominion University	1. Louisiana Tech University	1. Portland State University/ University of South Florida
2. Pennsylvania State University	2. University of Akron	2. Michigan State University	3. Michigan State University
3. Michigan State University	3. Wayne State University/Clemson University	3. Alliant International University	4. Texas A&M University
4. Texas A&M University	5. Pennsylvania State University/Portland State University	4. Pennsylvania State University/Seattle Pacific University	5. Rice University/ University of Minnesota
5. Old Dominion University			

Table 5
Beiler et al. (2014) Rankings

Rank by overall publications	Rank by I-O publications	Rank by SIOP presentations	Rank by overall productivity	Rank by overall productivity per capita
1. Michigan State University	1. University of South Florida	1. Michigan State University	1. Michigan State University	1. Ohio University
2. University of Minnesota	2. University of Georgia	2. University of Central Florida	2. University of South Florida	2. University of Maryland
3. University of South Florida	3. Michigan State University	3. George Mason University	3. University of Minnesota	3. University of Minnesota
4. University of Central Florida	4. University of Minnesota	4. University of Minnesota	4. University of Georgia	4. University of Albany, SUNY
5. Griffith University	5. Purdue University	5. University of South Florida	5. George Mason University	5. Auburn University

Results

Data were collected on a total of 185 faculty members across 31 PhD programs from the 19 different ranking methodologies. Across all rankings, the University of Illinois at Urbana-Champaign has produced the most faculty (7%), followed by the Universities of Akron and South Florida at 5% each. The rankings were examined individually, and the results are displayed in Table 6. In 17 out of 19 rankings, there was interprogram hiring. The highest percentage of interprogram hiring occurred for Landers et al.'s (2018) ranking by raw I-O citation count (37%) followed by their ranking by raw I-O publication counts (27%). Three rankings had 26% interprogram hiring: *U.S. News and World Report* (2017), Roman et al.'s (2018) ranking by faculty quality, and Beiler et al.'s (2014) ranking by SIOP presentations. We then examined only recently graduated faculty, resulting in 11 rankings with interprogram hiring. Landers et al.'s (2018) ranking by raw I-O publication counts (60%) had the highest percentage for those recently graduated but were followed closely by Landers et al.'s ranking of raw I-O citation count and Beiler et al.'s (2014) rankings by overall publications and SIOP presentations, all at 50% interprogram hiring.

Furthermore, we discovered that five PhD programs had hired their own alumni. The results are presented in Table 7. 71% of the University of Western Ontario's faculty are also alumni, while 40% of the University of Minnesota's faculty are alumni. When examining the data for recent graduates, there were no instances of programs with alumni hiring.

Table 6
Percentage of Interprogram Faculty by Ranking Type

Ranking	All faculty			Recently graduated faculty		
	Interprogram faculty	Total faculty	Percentage of interprogram faculty	Interprogram faculty	Total faculty	Percentage of interprogram faculty
<i>U.S. News and World Report</i> (2017)	9	35	26%	1	6	17%
Landers et al. (2018)						
Raw interdisciplinary counts	4	41	10%	1	8	13%
Raw I-O publication counts	10	37	27%	3	5	60%
Raw interdisciplinary citation count	9	42	21%	2	8	25%
Raw I-O citation count	14	38	37%	2	4	50%
Howald et al. (2018)						
Teaching development opportunities	3	36	8%			
Research development opportunities	5	38	13%			
Applied development opportunities	3	29	10%			
Roman et al. (2018)						

Student perceptions	3	35	9%	1	11	9%
Program culture	5	40	13%			
Learn practical skills	2	32	6%			
Faculty quality	11	43	26%	3	7	43%
Beiler et al. (2014)						
Overall publications	3	29	10%	2	4	50%
I-O publications	9	40	23%	3	11	27%
SIOP presentations	9	35	26%	3	6	50%
Overall productivity	8	40	20%	4	9	44%
Overall Productivity per capita	5	26	19%			

Table 7
Percentage of Alumni Faculty by PhD Program

Program	Alumni faculty	Total faculty	Percentage of alumni faculty
Rice University	1	6	17%
University of Akron	3	9	33%
University of Minnesota	2	5	40%
University of South Florida	1	10	10%
University of Western Ontario	5	7	71%

Discussion

The present research attempted to replicate prior findings on PhD faculty source from sociology (Emerson, 2018) and management (Bedeian & Field, 1980). Interprogram hiring ranged from a low of 6% to a high of 37%. According to SIOP's Graduate Training Programs data (n.d.), there are 74 North American (71 U.S. and 3 Canada) doctoral programs in psychology departments. Given that there were five schools per ranking, the chance occurrence of interprogram hiring is 6.76%. All but one ranking (learn practical skills) exceeded this threshold, indicating that current hiring practices in doctoral programs may be problematic. Unfortunately, we are unable to make comparisons to other fields of study due to differences in methodologies and results (Bedeian & Field, 1980; Clauset et al., 2015; Emerson, 2018); none of these studies reported percentages of interprogram hiring within top doctoral programs. However, we can compare interprogram hiring within I-O psychology; the average rate was 18% for all faculty, but it was nearly double for recent graduates at an average of 35%. This dramatic increase in interprogram hiring over the last 10 years is concerning. It could be that interprogram rates have always been this high, but because the top programs have changed over time, the overall faculty rate is lower. Unfortunately, the alternative is that hiring practices have become more exclusive up in the past decade.

The frequency of interprogram hiring varied widely depending on ranking approach. Interprogram hiring occurred most often by citation count ranking. On the surface, citations may be an indication of research productivity or program prestige. This may lead to more favorable hiring between top academic programs. If a highly ranked I-O psychology program is reading the work of a promising PhD student from another highly ranked program, it may increase the likelihood of selection during that student's academic job search. The raw I-O psychology publication count ranking may indicate a favorability for I-O psychology-specific publications in faculty hiring. The data from recent graduates seem to indicate that interprogram hiring has increased dramatically, especially in rankings of I-O psychology-specific productivity (citation counts, publications, and presentations). Deeper examination reveals that these productivity-related rankings may be less about program prestige and more a function of productivity as a result of faculty size. The frequencies of faculty sizes are displayed in Table 8. Although six is the average faculty size, two programs, Michigan State and University of South Florida, have a faculty size of 10. Both programs also appear in every raw productivity ranking, which is unsurprising, given their faculty sizes.

Table 8
Frequency of Faculty Headcounts

Faculty size	N
4	7
5	6
6	10
7	3
8	1
9	2
10	2

More than half of the ranking methods, whether by faculty quality, SIOP presentations, or citation counts seems to be a measure of research productivity, and research productivity appears to be an important criterion by which programs are selecting faculty. This proposition is further supported by the increased interprogram hiring in the past 10 years for these specific ranking methods. Academic programs presumably select from other top programs due to the inherent research opportunities, such as grants, afforded to these PhD students. These programs may also offer PhD students a “behind the scenes” look at the process of publication and research that gives the students an advantage in gaining employment at another highly ranked programs. The top programs in the *U.S. News and World Report* and other rankings may attract students who are more inclined to seek out an academic career.

Based on the present findings, potential PhD students looking to establish academic careers in prestigious programs may wish to take program rankings more seriously. Those students should also focus on publishing research in highly regarded I-O psychology journals to be hired for future academic positions. These top doctoral programs may also wish to evaluate the pedigree of their faculty and how much publications play a role in their hiring process. These findings may discourage students from lower ranked institutions from attempting an academic career in a highly ranked program. The hiring patterns may also reflect an accrual effect of rewards that is apparent only in top-ranked programs such as high-quality research assistants, and there may be a potential halo effect associated with a distinguished program (Bedeian & Field, 1980). The top I-O programs may wish to evaluate whether their hiring process languishes in the closed networks that have been highlighted in the academic hiring of other fields (Clauset et al., 2015). Although one can argue that hiring faculty from similarly prestigious programs can reinforce the academic culture and values of the institution, there is a growing argument that increasing the cognitive or deep diversity (e.g., how people think, feel, and act) within organizations (Chamorro-Premuzic, 2018) can lead to increased success. As a result, there is potential value in opening up these networks for PhD students from other institutions to provide fresh, innovative perspectives at high-ranking programs, infusing them with a greater likelihood for constructive disruption that can help programs change and grow with I-O psychology. As Clauset et al. (2015) note, faculty hiring affects “research priorities, resource allocation, and educational outcomes.” Opening faculty hiring networks improves all of those outcomes through cognitive diversity.

Students that are interested in pursuing careers in academia at the most prestigious institutions should be more careful about program choice. The present findings indicate that where one receives their PhD has a relationship to where one becomes a faculty member. Students should reflect on their career goals and make their choices about PhD programs carefully. Potential PhD students should carefully vet programs about their opportunities for research, applied experience, and teaching experience. This information will allow students to make more effective decisions regarding their future career prospects.

Caveats

The researchers wished to present several caveats around the analysis conducted in this study.

1. *Program rankings:* There were 19 different program rankings utilized in the current research, which featured 32 different institutions. Emerson's (2018) original methodology focused on a single list of top 10 schools from *U.S. News and World Report*. Unfortunately, the I-O program list only featured five schools, necessitating a search for additional rankings. Our search proved too fruitful, yielding 19 different lists, which prompted us to modify our methodology and focus on comparison. The frequency of program appearance among all rankings is listed in Table 9. The frequency gap between the top three programs (Michigan State University, University of Minnesota, and University of South

Florida) and the rest of the list indicates that we may have a criteria problem, especially because 13 schools only make a single appearance. It begs the question, what constitutes a top program? Our data indicate that there is not a lot of agreement on the subject, given the surprising variance. Part of this may be due to poor ranking methodologies, such as not controlling for faculty size when ranking by citation count, in the cases of Landers et al. (2018) and four of Beiler et al.'s (2018) rankings. Of course, programs with larger faculty sizes will always have an advantage when it comes to raw counts; more hands churn out more publications. These issues with the rankings ultimately affect potential PhD students as they navigate to which doctoral programs to apply. As the main consumers of these rankings, the sheer number of them as well as their inconsistencies can be confusing to individuals who are still familiarizing themselves with I-O and are yet untrained in critically evaluating research methodology.

2. *The uniqueness of academic hiring practices:* Academic hiring practices differ significantly from other organizational hiring practices. These searches occur over long periods of time, and new hires, in some cases, have long gaps of time between hiring cycles due to tenure of established faculty (Tierney, 1988). Unlike other hiring practices, academia tends to use search committees that convene when an academic budget line opens. Thus, the decision-making process for hiring faculty is often distributed among several different faculty members. In some cases, these individuals are not members of the academic department but merely serve on the search committee. Hiring decisions and candidates are often approved by deans, provosts, and university presidents who have the right to veto candidates. Therefore, the effect of a candidate's academic pedigree is difficult to discern through this analysis.

Table 9

Frequency of Program Appearances Among All Rankings

Program	N
Michigan State University	14
University of Minnesota	11
University of South Florida	10
University of Georgia	6
Pennsylvania State University	5
Rice University	5
Texas A&M University	4
Alliant International University, San Diego	3
George Mason University	3
Griffith University	3
Portland State University	3
Roosevelt University	3
Clemson University	2
Louisiana Tech University	2
Old Dominion University	2
University of Central Florida	2
University of Nebraska at Omaha	2
University of Texas at Arlington	2
University of Western Ontario	2
Auburn University	1
Bowling Green State University	1
Georgia Institute of Technology	1
Illinois Institute of Technology	1
Northern Illinois University	1
Ohio State University	1
Purdue University	1
Seattle Pacific University	1
The Chicago School of Professional Psychology	1
University of Albany, SUNY	1
University of Akron	1
University of Maryland	1
Wayne State University	1

3. *The scarcity of academic jobs* – The number of full-time, tenure track academic positions is decreasing as the rise of untenured and adjunct faculty continue in universities (Gappa, 2000; Thedwall, 2008). The present analysis may be the result of growing changes in higher education hiring (Kezar & Gehrke, 2014) and an increasing scarcity in academic jobs. This limited number of jobs may hinder graduates from less prestigious programs from attaining academic positions. Furthermore, it may reduce the likelihood of high-performing students from all programs to attempt the academic job market.

Our research question began as an exploration of where top I-O programs hire their faculty. However, what we have discovered is a classic criterion problem related to program rankings. Although there seems to be an 18% rate of interprogram hiring, averaged across our results, this percentage may or may not be inherently problematic. Without an adequate comparison group, it is difficult to say. The greater concern is the dramatic increase of inter-program hiring of recent graduates to 35%, indicating a potential shift in academic hiring practices. Inter-program hiring has been highlighted as an issue in other fields, so it behooves us as a discipline to be mindful of this issue, especially because selection is within the I-O wheelhouse. Our second finding involves the sheer volume of rankings themselves. With so many rankings, students may be confused as to how to navigate the educational path toward an academic career. Thus, the criterion problem of effective faculty and high-quality programs affects both faculty hiring and students entering PhD programs. Future research should seek to clarify the criterion problem first before evaluating interprogram hiring.

References

- Bedeian, A. G., & Feild, H. S. (1980). Academic stratification in graduate management programs: Departmental prestige and faculty hiring patterns. *Journal of Management*, 6(2), 99-115.
- Beiler, A. A., Zimmerman, L. M., Doerr, A. J., & Clark, M. A. (2014). An evaluation of research productivity among I-O psychology doctoral programs. *The Industrial-Organizational Psychologist*, 51(3), 40-52.
- Cassuto, L. (2014). Can We Create a Culture That Values Good Teaching? *Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Can-We-Create-a-Culture-That/146779>
- Chamorro-Premuzic, T. (2018, September 3). The case for boosting cognitive diversity in organizations. *Forbes*. Retrieved from <http://forbes.com/sites/tomaspremuzic/2018/09/03/the-case-for-boosting-cognitive-diversity-in-organizations/>
- Clauset, A., Arbesman, S., & Larremore, D. B. (2015). Systematic inequality and hierarchy in faculty hiring networks. *Science Advances*, 1(1), e1400005.
- Emerson, M. O. (2018, January 8) Guest post: Who hires whom? Retrieved from <https://scatter.wordpress.com/2018/01/08/who-hires-whom/amp/>
- Fadeeva, Z., & Mochizuki, Y. (2010). Higher education for today and tomorrow: University appraisal for diversity, innovation and change towards sustainable development. *Sustainability Science*, 5(2), 249-256.
- Flaherty, C. (2015) Closed networks. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2015/02/13/study-suggests-insular-faculty-hiring-practices-elite-departments>
- Fuerstman, D., & Lavertu, S. (2005). The academic hiring process: A survey of department chairs. *PS: Political Science & Politics*, 38(4), 731-736.
- Gappa, J. M. (2000). The new faculty majority: Somewhat satisfied but not eligible for tenure. *New Directions for Institutional Research*, 2000(105), 77-86.
- Guest, D. E. (1997). Human resource management and performance: A review and research agenda. *International Journal of Human Resource Management*, 8(3), 263-276.
- Harvey, L. (2008) Rankings of higher education institutions: A critical review. *Quality in Higher Education*, 14(3), 187-207.
- Howald, N., Nesnidol, S., Horan, K., & Matthews, R. A. (2018). Ranking PhD I-O programs by development opportunities. *TIP: The Industrial-Organizational Psychologist*, 55(4).
- Industrial Organizational Psychologist: An Overview (2018) Retrieved from <https://money.usnews.com/careers/best-jobs/industrial-psychologist>
- Jaschik, S. (2018) Are admissions gatekeepers diverse enough? *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/admissions/article/2018/02/05/article-renews-debate-over-whether-admissions-officials-are-diverse>
- Kezar, A., & Gehrke, S. (2014). Why are we hiring so many non-tenure-track faculty? *Liberal Education*, 100(1), n1.
- Landers, R. N., Armstrong, M. B., Helms, A. B., & Epps, A. N. (2018). The interdisciplinarity of I-O psychology PhD programs and faculty. *TIP: The Industrial-Organizational Psychologist*, 55(4).

- Østergaard, C. R., Timmermans, B., & Kristinsson, K. (2011). Does a different view create something new? The effect of employee diversity on innovation. *Research Policy*, 40(3), 500-509.
- Pell, A. N. (1996). Fixing the leaky pipeline: Women scientists in academia. *Journal of Animal Science*, 74(11), 2843-2848.
- Reese, S. (2014) When productivity becomes hyperactivity. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/advice/2014/03/14/cautionary-words-about-academic-productivity-and-problem-hyperactivity-essay?platform=hootsuite>
- Roach, M., & Sauermann, H. (2010). A taste for science? PhD scientists' academic orientation and self-selection into research careers in industry. *Research Policy*, 39(3), 422-434.
- Roman, J.-L. R., Barnett, C. N., & Eatough, E. M. (2018). I-O graduate programs rankings based on student perceptions. *TIP: The Industrial-Organizational Psychologist*, 55(4).
- Rotolo, C. T., Church, A. H., Adler, S., Smither, J. W., Colquitt, A. L., Shull, A. C., & Foster, G. (2018). Putting an end to bad talent management: A call to action for the field of industrial and organizational psychology. *Industrial and Organizational Psychology*, 11(2), 176-219.
- Salter, N. P., Allen, J. A., Gabriel, A. S., Sowinski, D., & Naidoo, L. J. (2018). The results are in! Updated alternative I-O graduate program rankings. *The Industrial-Organizational Psychologist*, 55(4).
- Salter, N. P., Allen, J. A., Gabriel, A. S., Sowinski, D., & Naidoo, L. J. (2016). Call for proposals for I-O graduate program rankings. *The Industrial-Organizational Psychologist*, 54(1).
- Shellenbarger, S. (2010, May 26). What will be the hot jobs of 2018? *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/SB10001424052748704026204575266342935418962>
- SIOP. (n.d.). *Graduate training programs in I-O psychology and related fields*. Retrieved from <http://my.siop.org/GTP>
- Smaldino, P. E., & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, 3(9), 160384.
- Thedwall, K. (2008). Nontenure-track faculty: Rising numbers, lost opportunities. *New Directions for Higher Education*, 2008(143), 11-19.
- Tierney, W. G. (1988). Organizational culture in higher education: Defining the essentials. *Journal of Higher Education*, 59(1), 2-21.
- U.S. Bureau of Labor Statistics (2014). *Occupational outlook handbook*. Retrieved from <http://www.bls.gov/ooh/fastest-growing.htm>
- U.S. News and World Report (2018). *Best Graduate Schools Industrial Organizational Psychology*. Retrieved from <https://www.usnews.com/best-graduate-schools/top-humanities-schools/industrial-organizational-psychology-rankings>
- Warner, J., & Clauset, A. (2015). The academy's dirty secret. *Slate*. Retrieved from http://www.slate.com/articles/life/education/2015/02/university_hiring_if_you_didn_t_get_your_ph_d_at_an_elite_university_good.html



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Ask any C-level executive what keeps them up at night and chances are that a lack of deep leadership bench is at the top of their list. In fact, only 18% of HR professionals rate their organization as strong in current leadership bench strength (Hanson, 2011). So it is not surprising that identifying, developing, and retaining high potential talent is one of the most critical human capital issues facing organizations today (Silzer & Church, 2009). Changing workforce demographics, the impact of globalization and technology, and increased scrutiny from investors and boards of directors have increased the spotlight on the quality of an organization's leadership talent pipeline. Further, the war for talent is greater than ever, remaining a critical factor in strategic workforce planning efforts (Manpower Group, 2014).

Data from recent benchmarking studies (e.g., Church & Rotolo, 2013; Church, Rotolo, Ginther & Levine, 2015; McHenry & Church, 2018; Silzer & Church, 2010) show that organizations are investing in programs and solutions to address high potential leadership talent needs. Survey results suggest that this trend has steadily increased over the last 10 years. For example, Silzer and Church's (2010) survey found that 100% of organizations surveyed indicated that they have implemented a high potential program.

Table 1

Organizations With HiPo Programs, Adapted From Silzer and Church (2010)

Year	Study	%
2018	McHenry, Church	77%
2010	Silzer & Church	100%
2004	Slan & Hausdorf	31%
2003	Wells	55%
1994	Silzer Slider, Knight	42%

However, application of underlying high potential conceptual frameworks, measurement tools, development efforts, and other talent management practices differ widely across companies, resulting in varying degrees of organizational impact. For example, Church et al.'s (2015) study found that of companies who use assessments to identify high potential, only 28% of those companies reported that these programs had a significant organizational impact 12–18 months following the assessment. This can likely be attributed to the wide variability in assessment methods used, their application within the organization, poor program implementation, and lack of organizational support. With respect to high potential development programs, survey data presented by McHenry and Church in a 2018 workshop showed that 46% of organizations surveyed think their high potential programs are very effective. In addition, high potential acceleration methods that are considered to be most effective (e.g., tracking outcomes and success metrics for learning, holding managers accountable in performance management processes) tend to be the least used (McHenry & Church, 2018).

Table 2

From Church et al. (2015)

<i>Impact of assessments: What would you say has been the impact of the assessment and development process on the performance of participants within 12-18 months of assessment?</i>		
Response option	High potentials	Senior executives
No real noticeable impact (0% improvement)	3%	2%
Minor impact (1-4% improvement)	10%	9%
Moderate impact (5-9% improvement)	40%	37%
Significant impact (10-20% improvement)	28%	28%
Dramatic improvement (21%+ improvement)	0%	5%
Too soon to tell	19%	19%

Although significant progress has been made over the last decade in providing clarity via conceptual frameworks to help understand key attributes, predictors, and accelerators of potential (Church & Silzer, 2014; Silzer & Church, 2009; Silzer, Church, Rotolo, & Scott, 2017), there remains little independent guidance for practitioners looking to compare different practices.

- *What are the latest and best practices to identify, assess, and track high potential talent?*
- *Which development methods work best at accelerating their leadership capabilities?*
- *How do you keep your top talent engaged?*
- *How do you go about designing an integrated and strategic high potential talent management program?*

Interested in learning more about high potential leadership talent? Join us at the 2018 Leading Edge Consortium!

These questions and more will be addressed at this year's annual Leading Edge Consortium (LEC), "**High Potential: Identifying, Developing & Retaining Future Leaders.**" Join thought leaders, decision makers, and leading practitioners in learning about leading edge high potential practices and programs. There will be highly engaging sessions and impactful workshops led by leaders in the field. Seasoned academics, practitioners, and chief human resource

officers from top organizations will share the latest research and best practices, with a strong focus on useful and strategic applications to share with your organization.

This conference offers outstanding and future-focused workshops aligned with changing business needs, and engaging and diverse conference sessions. In addition to workshops and sessions, the LEC will offer many opportunities for networking with thought leaders and other attendees in unique settings (networking dinners, and a welcome reception aboard the USS Constellation!). Major consulting firms and assessment partners will also be on hand to preview and discuss their latest high potential innovations and solutions.

Confirmed speakers include:

Chief Human Resource Officers

- **Marcia Avedon**, PhD, Senior Vice President , Human Resources, Communications and Corporate Affairs, Ingersoll Rand, plc
- **Jane Ewing**, Senior Vice President, International People Division, Walmart International
- **Jeff Pon**, PhD, Executive Director, United States Office of Personnel Management
- **David Rodriguez**, PhD, Executive Vice President and Global Chief Human Resources Officer, Marriott International
- **Carol Surface**, PhD, Chief Human Resources Officer, Medtronic

Leading High Potential/Leadership Thinkers

- **Seymour Adler**, PhD, Partner, Talent Advisory Practice, Aon Hewitt
- **Bill Byham**, PhD, Cofounder and Executive Chairman, Development Dimensions International
- **Allan Church**, PhD, Senior Vice President Global Talent Assessment & Development, PepsiCo
- **Sandra Davis**, PhD, Chair and Founder, MDA Leadership Consulting
- **David Day**, PhD, Professor of Psychology and Director of the Kravis Leadership Institute, Claremont McKenna College
- **Timothy Judge**, PhD, Joseph A. Alutto Chair in Leadership Effectiveness Executive Director, Fisher Leadership Initiative Professor, Ohio State University
- **Cindy McCauley**, PhD, Senior Fellow, Center for Creative Leadership
- **Matt Paese**, PhD, Senior Vice President, Succession & C-Suite Services, DDI
- **John Scott**, PhD, Chief Operating Officer and Co-Founder of APTMetrics
- **Rob Silzer**, PhD, Managing Director HR Assessment & Development Inc.; Doctoral Faculty, Baruch/Graduate Center, City University of New York
- **Ken Willner**, Partner and Vice Chair, Global Employment Law Practice, Paul Hastings Law Firm

"HIP Talks" (Highlights and Insights in Practice)

- **Darin Artman**, PhD, Head of Human Resources, European Markets, Australia, and Canada, Bristol-Myers Squibb
- **Mike Benson**, PhD, General Mills, Vice President Talent & Organization Capabilities, General Mills
- **Robin Cohen**, PhD, Head of Human Resources Global Finance, Johnson & Johnson
- **Julie Fuller**, PhD, Vice President, Organizational Effectiveness & Talent Management, Nike
- **Joe Garcia**, PhD, Head Talent Management and Organizational Effectiveness, The Home Depot
- **Alison Hartmann**, Assessment Strategy Leader, IBM
- **Laura Mattimore**, PhD, Vice President of Global Talent The Procter & Gamble Company
- **Karen Paul**, PhD, U.S. Talent Development Leader, 3M
- **Raphael Prager**, PhD, Director Global Talent Assessment and Development, PepsiCo
- **Lorraine Stomksi**, PhD, Vice President Global Leadership, Learning and Selection, Walmart

LEC Workshops (October 18th)

Workshop 1: Identifying and Assessing High Potential Leadership Talent

This workshop will provide guidance on the foundational decisions that impact the effectiveness and long-term sustainability of high potential programs, including how to define potential, which attributes should be used to differentiate talent, and what specific assessment approaches should be leveraged at different organizational levels. There will also be a discussion on how to make choices that fit different organizational needs and strategies.

Workshop Presenters:

- **John Scott**, PhD, Chief Operating Officer and Co-founder of APTMetrics
- **Rob Silzer**, PhD, Managing Director HR Assessment & Development Inc.; Doctoral Faculty, Baruch/Graduate Center, City University of New York
- **Matt Paese**, PhD, Senior Vice President, Succession & C-Suite Services, DDI

Workshop 2: Agile Approaches to Developing Agile High-Potentials

Recognizing that business and sociopolitical conditions are changing more rapidly than ever before, many organizations are seeking to develop “agile leaders” who can quickly make sense of problems and trends even in the most turbulent environments, cope effectively with large-scale failure and disruptions, and rally organizations towards a better future. In this workshop, we will review how organizations and those involved in leadership development are defining agility, what it looks like behaviorally, what capabilities or competencies seem most relevant, and how organizations are seeking to develop their high-potentials to be more agile. In addition, we will use a design thinking approach to cocreate with workshop participants a vision for the future of agility (i.e., what agile leadership should look like, how to develop agility). This will provide participants with exposure to a robust and proven methodology (design thinking) that can help enhance the creativity and quality of leadership development interventions.

Workshop Presenters:

- **Jeff McHenry**, PhD, Rainier Leadership Solutions
- **Andrew Webster**, Vice President of Transformation, ExperiencePoint
- **Robin Cohen**, PhD, PhD, Head of Human Resources Global Finance, Johnson & Johnson
- **Lorraine Stomski**, PhD, Vice President Global Leadership, Learning and Selection, Walmart

Workshop 3: Building Integrated and Sustainable High-Potential Talent Management Programs:

This workshop will focus on the critical conceptual and design factors to building large-scale, integrated and successful high-potential programs in organizations. It will build on recent benchmark research with top development companies and extensive experience obtained from multiple organizational settings. Organizational applications ranging from early career programs to those aimed at preparing HiPos for the next wave C-suite roles will be discussed.

Workshop Presenters:

- **Allan Church**, PhD, Senior Vice President Global Talent Assessment & Development, PepsiCo
- **Laura Mattimore**, PhD, VP Global Talent, The Proctor & Gamble Company
- **Seymour Adler**, PhD, Partner, Talent Advisory Practice, Aon Hewitt

LEC Organizing Committee

- **Rob Silzer**, PhD, Co-Chair
Managing Director, HR Assessment and Development Inc./Doctoral Faculty, Baruch, Graduate Center, CUNY
- **Allan Church**, PhD, Co-Chair

SVP, Global Talent Assessment & Development, PepsiCo

- **David Baker**, PhD
Vice President, IMPAQ International
- **Karen Grabow**, PhD
Principal Consultant, Grabow Consulting, LLC
- **Raphael Prager**, PhD
Director Global Talent Assessment and Development, PepsiCo
- **John Scott**, PhD
COO, APTMetrics, Inc.
- **Lorraine Stomski**, PhD
Vice President, Global Leadership, Learning and Selection, Walmart

The 2018 LEC will be held at the Renaissance Baltimore Harborplace Hotel, October 19-20. Preconsortium workshops will be held on October 18 at the same location.

Please go to <http://my.siop.org/Meetings/Leading-Edge-Consortium/2018-LEC> to register for the LEC conference and workshops and to find more information on the LEC.

References

- Church, A. H., & Rotolo, C. T. (2013). How are top companies assessing their high-potentials and senior executives? A talent management benchmark study. *Consulting Psychology Journal: Practice and Research*, 65, 199–223.
- Church, A. H., Rotolo, C. T., Ginther, N. M., & Levine, R. (2015). How are top companies designing and managing their high-potential programs? A follow-up talent management benchmark study. *Consulting Psychology Journal: Practice and Research*, 67(1), 17.
- Church, A. H., & Silzer, R. (2014). Going behind the corporate curtain with a blueprint for leadership potential: An integrated framework for identifying high-potential talent. *People & Strategy*, 36, 51–58.
- Hanson, E. (2011). Talent reviews and high-potential identification: Overcoming five common challenges. Retrieved from http://www.ddiworld.com/DDIWorld/media/white-articles/talentreviewsandhighpotentialidentification_wp_ddi.pdf
- Manpower Group (2014). The talent shortage continues: How the ever changing role of HR can bridge the gap. Retrieved from https://www.manpowergroup.com/wps/wcm/connect/c2ddd2bc-fa8f-4d7f-8281-6bd96071a160/2014_Talent_Shortage_WP_US2.pdf?MOD=AJPERES&CACHEID=c2ddd2bc-fa8f-4d7f-8281-6bd96071a160
- McHenry, J., & Church, A.H. (2018, April). *Leadership development programs: Current state and state of the art*. Workshop presented at the 33rd Annual Conference of the Society of Industrial-Organizational Psychology Conference, Chicago, IL.
- Silzer, R., & Church, A. H. (2009). The pearls and perils of identifying potential. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 2, 377–412.
- Silzer, R., & Church, A. H. (2010). Identifying and assessing high-potential talent: Current organizational practices. In R. Silzer & B. E. Dowell (Eds.), *Strategy-driven talent management: A leadership imperative* (pp. 213–279). San Francisco, CA: Jossey-Bass
- Silzer, R., Church, A. H., Rotolo, C. T., & Scott, J. C. (2016). I-O practice in action: Solving the leadership potential identification challenge in organizations. *Industrial and Organizational Psychology*, 9(4), 814-830.
- Silzer, R. F., Slider, R. L., & Knight, M. (1994). *Human resource development: A benchmark study of corporate practices*. St. Louis, MO: Anheuser-Busch.
- Slan, R., & Hausdorf, P. (2004). *Leadership succession: High potential identification and development*. Toronto, Canada: University of Guelph and MICA Management Resources.
- Wells, S. J. (2003). Who's next: Creating a formal program for developing new leaders can pay huge dividends, but many firms aren't reaping those rewards. *HR Magazine*, 48(11), 44–64.

**The Innovation & Learning Speaker Series:
A Partnership Between the Society for Industrial and Organizational Psychology (SIOP) and the United Nations
Office of Human Resources Management (OHRM)**

**Nabila Sheikh
PepsiCo**

**Anton Botha and Leila Regina El-Hage
United Nations**

**Aimee Lace
Columbia University**

In September of 2015, the United Nations of the world adopted 17 Sustainable Development Goals (SDGs) with the aim “to free the human race from the tyranny of poverty and want and to heal and secure our planet” by 2030 (United Nations General Assembly, 2015, p. 1). Last and far from least, the 17th Sustainable Development Goal is labeled “Partnerships for the Goals.” It emphasizes the critical need for strategic alliances, which was underscored in a synthesis report on the post-2015 agenda, titled “The Road to Dignity by 2030,” where the UN Secretary-General stated:

In an irreversibly interconnected world, the challenges faced by any become the challenges faced by each of us—sometimes gradually but often suddenly. However, facing these vexed challenges is not only a burden; it is far more an opportunity to forge new partnerships and alliances that can work together to advance the human condition. (United Nations, 2014, p. 5)

In the spirit of forging the kinds of productive and transformative partnerships envisioned above, the Society for Industrial-Organizational Psychology (SIOP) and the United Nations Office of Human Resources Management (OHRM) have embarked on a new collaboration: The Innovation & Learning Speaker Series. Launched in December 2017 at the United Nations Secretariat in New York, the Innovation & Learning Speaker Series brings experts in industrial-organizational (I-O) psychology to the United Nations to share research, theory, and evidence-based best practices with the UN human resources professionals. Through SIOP speakers’ practical examples and case studies from outside the UN context, OHRM staff gain insight into what other large international organizations are doing to tackle pressing industry challenges. This aligns with the OHRM team’s overarching objectives, which include:

- Encourage UN learning from industry;
- Find out what best practice trends dominate and why;
- Create a forum for discussion, deeper understanding and collective problem solving;
- Drive innovation, science, and data-led decision making; and
- Develop a safe space and platform for sharing information to help the United Nations deliver on its mandate.

The Innovation & Learning Speaker Series sessions are held live at the United Nations Secretariat building in New York City and also broadcast via Webex to various United Nations offices and duty stations around the world, including those in Geneva, Nairobi, and Bangkok, to mention a few. Altogether, approximately 200 United Nations staff members have joined each of the sessions from as far as China. The speaker series has thus far featured five I-O psychology academics and practitioners who are experts in their respective fields. Each session is briefly described next.

The inaugural Innovation & Learning Series speaker was **Christopher Rotolo**, vice president of Global Talent Management and Organization Development at PepsiCo. Dr. Rotolo kicked off the series on December 4, 2017

by speaking on the topic of **“Survey Design: Best Practices and Experiences in Survey Design, Analysis, Feedback, and Action-Planning.”** His practical and insightful seminar focused on best practices and considerations for large organizations in designing an engagement survey. The OHRM team was keen to learn about these considerations as they embarked upon the planning of their own organization-wide survey. The specialist-level knowledge that Dr. Rotolo shared was opportune and well-received by the maiden audience. Given the resounding positive feedback on this first session, the SIOP-UN committee began planning for subsequent sessions in the series and inviting additional I-O psychology experts.

The second session was held on February 12, 2018, featuring speaker **Tomas Chamorro-Premuzic**, chief talent scientist at ManpowerGroup and an international authority in psychological profiling, consumer analytics, and talent management. His presentation, titled the **“Talent Delusion: Why Data—Not Intuition—Is Key to Unlocking Human Potential,”** described the challenges organizations currently face to best measure, predict, and manage talent given the changing nature of work and traits of the workforce. He purported that an organization’s problems can best be solved by closely examining and understanding its people. In turn, organizational leaders can best understand their reputation through considering feedback, ideally crowdsourced. The UN OHRM team was particularly interested in insights Dr. Chamorro-Premuzic shared as they yielded novel considerations for their leadership and multirater programs.

The third session in the series took place on April 6, 2018, featuring **Douglas Reynolds**, who is executive vice president at Development Dimensions International (DDI), where he directs product development and technology functions. His presentation, **“Human Resources Management in the Digital Era: Addressing the Leadership Challenges of Digital Transformation in Today’s Organizations,”** focused on the dependence of organizations’ business models and processes on technology, and the challenges this brings. He shared how leaders in organizations have a critical role for managing these “digital transformations” and examined the skills and mindset required of leaders and particularly, leaders and partners in human resources, who must guide others through these dramatic shifts in culture and work process. Through reviewing common issues organizations face as they undertake these changes, Dr. Reynolds left the UN OHRM team with a set of valuable consideration points as they look to best utilize HR technology to improve processes and the overall employee experience.

The fourth session was held on June 8, 2018, featuring **Gary Latham**, who is Secretary of State professor of Organizational Effectiveness at the University of Toronto’s Rotman School of Management, as well as president of Work and Organizational Psychology at the International Association of Applied Psychology. Dr. Latham spoke about **“Performance Management: Conquering Performance in the Public Sector.”** His talk centered around a three-step coaching process, including how to build resiliency in staff through goal setting, outcome expectancy, and the concept of self-efficacy. The information and knowledge shared will help the United Nations improve its performance management practices.

The fifth and most recent session took place on August 3, 2018 and featured **Lori Foster**, professor of Industrial-Organizational psychology at North Carolina State University (USA) and the University of Cape Town (South Africa), and a member of the SIOP UN Committee. Dr. Foster spoke about **“Applying Behavioral Insights to HR: Maximize HR Policy Outcomes by Leveraging Insights From the Behavioral Sciences.”** Her presentation focused on defining important concepts within the field of behavioral science, as well as trends in applying behavioral insights to organizations. A key takeaway of the session was understanding the “architecture of choice” and how this understanding is used by many organizations, including governments, to design and test behaviorally informed interventions. The session was interactive, lively, and impactful. The information and knowledge shared will help the United Nations follow a more rigorous, scientific approach when developing programs and policies.

To enhance the reach of this speaker series beyond the UN and engage local I-O students, the SIOP UN Committee has begun to extend invitations to select graduate students with a special interest in humanitarian work psychology from I-O psychology programs. The engaging experience of attending a session at the UN provides I-O

graduate students a valuable opportunity to network with UN OHRM staff and a special chance to hear first-hand from esteemed experts on I-O psychology topics they may be currently studying in their program. To date, graduate students from Baruch College, Columbia University, and North Carolina State University have had the opportunity to attend, thus raising awareness of the SIOP UN Committee and its objectives, which include identifying and relaying job and internship opportunities available at the UN for I-O students.

The Innovation & Learning Speaker Series has earned a positive reputation at the UN, including among key leaders, who have attended the sessions to listen, learn, contribute, and support this partnership. Ms. Martha Helena Lopez, assistant secretary general for the United Nations Office of Human Resources Management introduced several sessions. As she stated,

I think this is an excellent idea... We thank the collaboration between the UN and the Society for Industrial and Organizational Psychology... I want to thank everyone who is supporting us in novel ways of approaching and challenging our innovation in the UN. We also want to encourage all our colleagues around the world to know what is outside in the industry and to keep up to date on those ideas. We want to have a forum for exchange and drive the HR agenda not only in the UN system and the international community.

Ms. Lopez later addressed the Innovation & Learning Speaker Series organizers in her remarks, noting: "The Sustainable Development Goals has as one of its goals partnership, and I think this is something you are supporting: Partnership across the world."

The SIOP-UN Committee and UN OHRM team will continue to build this partnership and the Innovation & Learning Speaker Series in the days to come by featuring additional academics and practitioners from SIOP with expertise in topic areas of timely relevance to the UN OHRM team's initiatives.

References

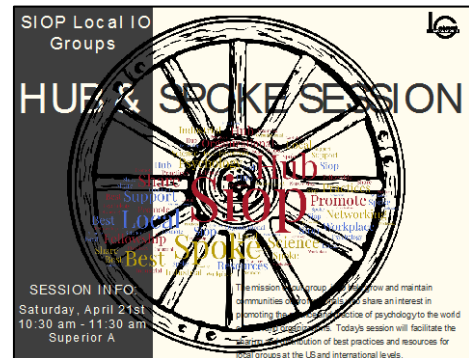
- United Nations (2014). *The road to dignity by 2030: Ending poverty, transforming all lives and protecting the planet. Synthesis report of the secretary-general on the post-2015 agenda*. Retrieved from http://www.un.org/disabilities/documents/reports/SG_Synthesis_Report_Road_to_Dignity_by_2030.pdf
- United Nations General Assembly (2015). *Transforming our world: The 2030 agenda for sustainable development*, A/RES/70/1. Retrieved from http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

Support for Local I-O Groups: Results from the Hub and Spoke Alternative Session

Authors: Brooke Allison (TIAA), **Michael Chetta** (Talent Metrics), **Anna Erickson** (SHL), Pete Rutigliano (Mercer/Sirota), **Peter Scontrino** (Scontrino-Powell), **Donna Sylvan** (Sylvan & Associates), **Naz Tadjbakhsh** (Alliant International University), **Ginger Whelan** (Whelan & Associates)

Many SIOP members belong to grass-root, local I-O groups designed to bring like-minded colleagues together to socialize, network, and learn. The SIOP Local I-O Group Relations Committee hosted a Hub and Spoke alternative session at the Chicago conference to learn how SIOP can support the needs of groups. In this session, members represented the “spokes” they join one of four “hubs.” Each hub was designed to listen to member needs based on one of four stages of a group’s development: start up, new, mature, and reviving.

This article provides a summary of this innovative session. This article is not intended to be an exhaustive list of recommendations; rather, our goal is to share the results of the session and build momentum for future idea exchange. We invite you to contact us with your ideas by reaching out to your regional representative listed at the end of this article.

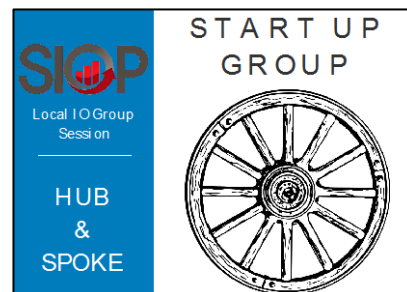


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Start Up Hub

Look Before You Leap: Starting a Local I-O Group

Start up groups involve one or more individuals who want to get a group off the ground. Individuals in these groups are trying to find like-people, host a first meeting, and decide on the group’s format. Tadjbakhsh and Michael Chetta hosted this hub. Below are questions raised in this hub along with proposed solutions brainstormed by the participants.



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Naz

What is “Step 1” for starting a group?

- **Create a clear purpose statement.** Creating a purpose statement and supporting plan is step one for starting a group because when the founding members are forming the grassroots local I-O group, prospective members need to clearly understand why the group is meeting in order to make a connection.
- **Foster a connection.** Founding members are asking people to enlist into a collective vision; prospective members need to believe in the group’s underlying purpose to make a decision to join. Once people are emotionally connected to the purpose statement and believe in the “cause,” it is up to the founding members to deliver on that purpose and use it as a guiding compass for increasing its followership and building the momentum.
- **Watch Simon Sinek’s TED Talk, “[How Great Leaders Inspire Action](#).”** This video provides a simple, yet powerful framework (The Golden Circle) for creating a purpose statement.
- **Review the Local I-O Toolkit.** The [Local I-O Toolkit](#) is available on the SIOP website and describes how define, organize, launch, and maintain a local I-O group.

Does it cost a lot to start a new group?

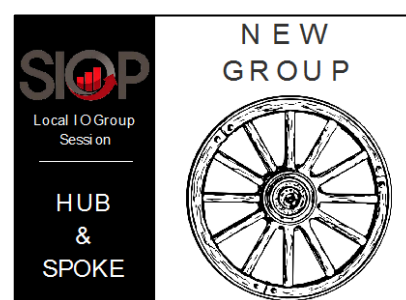
- **There are many ways to prepare for and host an event at low cost.** You can create beautiful flyers using [Canva](#) to post on social media, and purchase affordable snacks and beverages from Costco. If you can't find a meeting space for free, meet on a slow night at a restaurant (e.g., Monday, Tuesday or Thursday) to get the best rates.

Note: Even when leaders of local I-O groups spend a lot of money on refreshments in hopes of attracting people to events, the refreshments may be left untouched—even during dinner time! If you attract people who align with the group's purpose and maintain that ethos at your events, attendees will show up regardless of refreshments or costly event marketing. These followers can potentially be identified as future successors to sustain your group's long-term activity.

New Group Hub

Accelerate: Building Your New Group's Momentum

New groups are those who have recently started and are looking for ways to increase stability. Groups in this stage are usually refining clarifying their purpose and roles and are addressing logistics decisions. Brooke Allison and Donna Sylvan facilitated a discussion about issues facing new groups. Participants in this hub discussed concerns about membership, meetings and leadership.



and

Refining Meeting Purpose

- **Local I-O groups exist to fulfill needs that may not be met elsewhere in the I-O community.** For many, their local group is a space to connect with current, former, and future colleagues. Other opportunities include collaboration, prospects, partnerships, and continuing education credits.
- New groups continue to explore the extent to which the purpose of their program is networking, professional development, or some combination. New groups are encouraged to create charters and constitutions (or bylaws) that result in guiding principles. With a clearly-defined purpose, decisions follow about group structure and who to include as members.

Refining Membership

- **Frequently membership is grouped into two categories:** professional members and student members. Professional members may include people employed in academic, consulting, and corporate positions. Do they need a degree in I-O psychology and, if so, what level? Can someone with interest in applying I-O principles to the workplace without a degree in I-O psychology be a member? For student members, considering field of study, graduate vs undergraduate status, and type of enrollment (full time or part time) are often considered. Will dues be required to maintain membership? How will we monitor membership and collect dues?
- **New groups must identify and connect with potential members.** The personal networks of the founders and current members are great resources. Utilizing I-O graduate programs and consulting firms, corporations and other businesses that tend to employ individuals with I-O backgrounds is also possible. Some use social media to attract and inform others about their group, create their own websites to share information, or utilize preexisting websites, such as a university's website, to host group information. Leveraging participant's social networks to connect with speakers is also key. Groups often collect and use feedback from members to identify answers to common questions about group programming, relying on those members for content. Surveying is common practice, though there are multiple ways to collect feedback beyond member surveys.

Refining Meeting Logistics

- **Frequency and method.** Many local groups meet annually, some biannually, others weekly. A new group's charter and call-to-action will inform how often the group should meet and exchange information. Groups also identify and vary meeting locations to accommodate participants. Given the pressures of time and distance, some new groups leverage virtual options to get together. Other new groups will find it easier to meet at restaurants or informal gathering areas, whereas groups hosting high profile speakers of psychology may choose more formal venues.

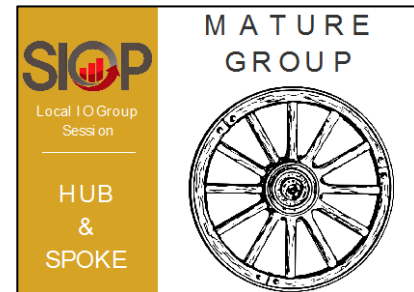
Refining Leadership Roles

- **New groups often rely on one person or a small group of people to get started.** Regardless of formal structure, leadership is required to maintain and build the group's momentum. Sharing responsibilities is one way to get others involved as volunteers and build commitment and support of the group. Groups may also have formal structures that build succession into leader roles; leadership responsibilities and succession strategies are typically documented in the group's bylaws and role descriptions. As local group leaders are typically volunteers with a passion for I-O psychology, group leadership is encouraged to take succession seriously and have plans in place to avoid disruption to agenda, programming, and engagement when leadership transitions.

Mature Group Hub

If You Build It, Will They Keep Coming?

Mature groups have typically been around for at least 5 years. Individuals who belong to a mature group are fortunate to have some history and routines that keep the group going. They may also be suffering from routine fatigue! Pete Rutigliano and Ginger Whelan discussed challenges for mature groups with members of several established local I-O groups and identified ways to address these issues.



How do you keep leaders engaged? One of the biggest challenges for any group is sowing the seeds for future leadership so that the burden isn't left to one or two enthusiastic leaders; and to avoid issues if a leader is called away due to family situations or job changes.

- **Prep one—work one.** Create a one-year term limit for the leadership role and have one person serve as the leader elect.
- **Board rotation.** Create a standard rotation so that each board member only performs one role a year. Make transitioning the rotation a ceremonial dinner celebration where the baton gets passed. This ensures that there is always someone to train the incumbent and coverage is facilitated in the case of life events and a loss of a leader.
- **Make it easy to meet.** Host the board meeting after a regularly scheduled meeting. Schedule your meetings for the year to get them on everyone's calendar.

How do you help new members feel included? Being around for a long time can make it harder for new members to fit in. Suggestions for mature groups to break down this barrier are to:

- Have current board members welcome and learn about new members
- Invite speakers to dinner after the meeting and invite everyone to join
- Ask if there are any new members and have them introduce themselves at each meeting

What type of members should we include? While you should define membership based on purpose of group and meet the needs of its members, the following ideas were raised at this hub and spoke table.

- **Student members.** Many groups invite students to attend by offering an individual discount or by encouraging professors to bring a group of students. Students offer new perspectives while providing a membership pipeline through colleges and universities.
- **Academic or practitioner?** We can promote a balance of science and practice in our profession by balancing these perspectives in your group's mix of members.
 - **More heavy on the scientist side?** Reach out to local work and organizational consultants to present in your classes. Invite practitioners to review a research proposal. Create a joint SIOP presentation.
 - **More heavy on the practitioner side?** Meet with the faculty from a local university or college and inquire about I-O or related courses. Invite faculty and students to your meetings. Charge students less to join if you have a membership fee.

How can we maintain member engagement? Creating a group can be fun in the beginning but become a bit stale over time after the initial glow wears off. Some ideas this hub discussed to increase engagement included:

- Discuss strategies to ensure member engagement at the end of each board meeting.
- Have board members wear name tags or ribbons that describe their roles.
- Make it easy for new members to meet people and feel like they belong.
- Check in with new members after they have attended their first meeting.
- Periodically survey members to identify better days and times for the meetings.
- Get creative with meeting topics by asking other local I-O group leaders what they do.
- Encourage new members to take on a committee role to get them involved.

Reviving Group Hub

No More Denial: How to Revive Your Group With the Vitality it Deserves

As we have worked with different local groups, we have identified that some groups are declining or struggling to continue. In this hub we covered issues related to group viability, or in need of a serious makeover. Peter Scontrino and Anna led this hub. Participants in this group spent the majority of the discussing ways to keep their local group healthy and inoculate themselves from the need to be revived.



revival,
Erickson
time

How do we address leader fatigue?

- **Have a succession plan.** This is particularly a challenge when one person has been a strong leader for a number of years. When the strong leader left, the local group often dissolved. A succession plan could include a transition from president elect to president to past president.
- **Have a board of directors.** The board of directors provides broader ownership and also can be linked to the succession plan. The board would also play an important role if a leader/president needs to resign.
-

How do we keep meetings fresh?

- Knowledge sharing and continuing education as well as socialization.
- Local groups that offered training sessions as well as socialization seemed to be more successful. The I-O psychologists who have continuing education requirements could earn some of these at local meetings.

- Providing a speaker list. Local groups often struggle to find topics and speakers. If SIOP provided a list of speakers, this would have value for local groups.
- Have broader sharing of information across local groups. It would be helpful for having a space where local groups could share information about speakers, resources, and activities that they have done.
- Link to local I-O university programs. Many local groups have found that local faculty rarely participate in their local group meetings. Some groups have collaborated with their local university to co-sponsor programs and to involve graduate students in local meetings.

Our local group may be past saving. Now what?

- **A fresh start.** If your group has been in active for a while, it may make sense to start again. Consider starting a new organization under a different name, with a redefined purpose and audience.
- **Learn from the past.** Before you begin, it may be wise to investigate the reasons for failure of previous groups. Reach out to previous local group members, even if they if they've moved away. Find out what worked, what didn't, and why the group floundered. Consider refining the purpose, changing meeting frequency or location, rotating leadership roles, or creating a more inclusive membership requirements to improve the likelihood of success for the new organization.
- **Set a strong foundation.** Once you're ready to begin, use the tips above to create a more sustainable organization going forward. Make sure your new group includes a strong vision and purpose, a committed board to help launch and guide the organization, and a plan for succession and sustainability for the future.

Resources for Your Local I-O Group

We learned a lot about the needs of local groups based on their stage of development. Below is a list of current resources provided to SIOP members to support the needs of your local group. Check the Local I-O Group Relations webpage on the SIOP website for some of the great ideas created in the Hub and Spoke Session in the future!

- **Ad Hoc Local I-O Group Relations Committee.** Our mission to help grow and maintain communities of professionals who share an interest in promoting the science and practice of psychology to the world of work and organizations. We do this by facilitating the sharing and distribution of best practices for local groups in the US and internationally.
- **SIOP Conference Committee Zone.** Please come visit us at the next conference to find out what new things are happening!
- **Tools on the SIOP website.** Find the following resources on the SIOP webpage under "Resources" and "Local I-O Groups and Related Organizations."
 - **Calendar.** A calendar showing local group meetings around the country.
 - **Local I-O Group List.** A list of local I-O groups to help you find a group new you.
 - **ToolKit.** A Toolkit was created to help local groups think through how to define, organize, launch, and maintain a local I-O group.
- **Regional representative.** If you would like more help, please contact one of the following representatives for your state or province!

Representative	Region	States	Email
Peter Scontrino	Northwest	WA OR ID WY UT CO AK MO	peter@scontrinopowell.com
Nazanin Tadjbakhsh	Southwest	CA AZ NM NV HI	ntadjbak@gmail.com
Anna Erickson	North Central	MN WI IA IL IN NE MI SD ND TX	anna.erickson@shl.com
Peter Rutigliano	Northeast	NJ NY CT PA	peter.rutigliano@mercero.com
Brooke Allison	New England	MA ME NH VT RI	Brooke.Allison@tiaa.org

Sharon Glazer
Michael Chetta
Donna Sylvan
Ginger Whelan
Lynda Zugec

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Southeast
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GA LA AL MS NC SC
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Canadian provinces

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gwhelan@performanceassocs.com
lynda.zugec@theworkforceconsultants.com



Local I-O Group Relations Committee. Back row: Michael Chetta, Lynda Zugec, Peter Scontrino, Donna Sylvan, Anna Erickson, Naz Tadjbakhsh. Front row: Brooke Allison, Ginger Whelan, Sharon Glazer



Local I-O Group Relations committee members, Ginger Whelan, Naz Tadjbakhsh, and Anna Erickson, promoting the SIOP regional representative program at the Chicago SIOP conference, 2018.



Visibility Committee Initiative Gains Momentum

2018 marks the 5th year of SIOP's Smarter Workplace Awareness Month. Begun in 2014, the initiative was invigorated this year by concerted efforts of the Visibility Committee's Media Subcommittee.

The focus for this year's Smarter Workplace Awareness Month was the [Top-10 Workplace Trends for 2018](#). SIOP's Top 10 Workplace Trends annually identify critically important workplace issues that I-O psychologists address in their research and practice as they strive to improve human well-being and performance in organizational and work settings.

Committee members created articles, infographics, and a new white paper on the topics highlighted in the 2018 Top 10 Trends.

Elisa M. Torres and Samantha Dubrow, both of George Mason University's Industrial-Organizational Psychology Department, provided "Tips for Making Leadership Development an Organizational Competitive Advantage," for the week focusing on Trends 6-8.

Dan J. Putka and David Dorsey from Human Resources Research Organization (HumRRO) penned "Beyond Moneyball: I-O Psychology and the Maturation of AI/ML Technology in HR for Week 3's focus on trends 3-5 .

For the final week of 2018's Smarter Workplace Awareness Month, Visibility Committee members produced two resources focusing on sexual harassment, the top workplace trend for 2018 identified by the SIOP members who responded to last year's questionnaire.

Alexandra Zelin, Assistant Professor, Psychology at the University of Tennessee at Chattanooga, wrote the feature for. "#MeToo at Work: How we can prevent #MeToo in the workplace."

Nicholas Howald, Sarah Melick, Melissa A. Albert, and Susannah Huang, graduate students at Bowling Green State University, **teamed up with Jessica M. Walker**, a Texas A&M doctoral student to produce the White Paper, Addressing Sexual Harassment in the Workplace.

The Visibility Committee is chaired by **Nikki Blacksmith**. **Amanda Woller** is chair of the Media subcommittee, which is organizing the Smarter Workplace Awareness initiative. Learn more about the Visibility Committee [here](#).

Did Smarter Workplace Awareness Month pass you by? If so, don't worry, all the information is still available on the SIOP Website, through a newly reorganized [landing page](#).

Below is the complete SWAM schedule. Visit <http://www.siop.org/smarterworkplace/> to access the infographics for these topics as well as other pertinent resources.

Week 1:

- #10 The Gig Economy and Contract Work
- #9 Automation of Jobs and Tasks

Week 2:

- #8 Selecting, Training, Developing, and Retaining Millennials
- #7 Leadership Development and Improvement
- #6 Algorithmic Selection Systems and People Analytics

Week 3:

- #5 The Changing Nature of How People Work
- #4 Artificial Intelligence and Machine Learning in I-O
- #3 Work-life Balance Interventions & Employee Wellness

Week 4:

- #2 Diversity, Inclusion, and Equity
- #1 Addressing Sexual Harassment in the Workplace

Foundation Spotlight: On Intelligent Fast Failure and Moon Shots

Milton D. Hakel, PhD

Three decades ago I had a colleague in Mechanical Engineering named Jack Matson. Jack taught a class popularly known as Failure 101. It was a required introductory course, and the core assignment for each small group of students was to (a) create some “thing,” for example, a mechanical gizmo, (b) run it until it failed, and (c) write up a full analysis of the failure. Students whose thing did not fail received Fs—the group that made and marketed fudge never succeeded at failing, so they got Fs.

Jack’s point was that sooner or later, everything fails. His mantra: Always prefer intelligent, fast failure, to what is otherwise inevitable: slow, stupid failure.

Recently I watched a TED Talk by Astro Teller about the [unexpected benefit of celebrating failure](#). Dr. Teller oversees X, Alphabet’s “moonshot factory” for audacious projects to solve concrete problems. His view: tackle the toughest chunks of a project first. He describes four projects, two that were terminated (“left behind on the cutting room floor”) and two that are ongoing (self-driving vehicles, Internet balloons). What was fascinating was handling the dynamic balance between the audacity of aspirations and the reality of failures, plus the occasional need for teams to change their perspectives and assumptions.

So let’s think about moon shots in I-O psychology. I-O professionals continue to become more respected and more visible in all kinds of organizations: private-sector, public-sector nonprofits, and government. We serve in senior corporate and government leadership positions, and also on National Academies Boards and Committees, and at the United Nations. The demand for evidence-based practice about people at work keeps expanding.

SIOP’s incorporation in 1982 marked a major transition for I-O professionals, from an all-volunteer underfunded dependency of APA into an autonomous self-funded association of professional, one that has student members, its own annual conferences and leadership consortia, two book series and a journal, and ties to many other associations. Membership and conference attendance counts are at all-time highs. If you will, it was I-O’s first moon shot.

Creation of the SIOP Foundation in 1996, another major transition, leveraged charitable giving provisions of US tax law to amplify SIOP’s awards program to include scholarships and grants. The first Owens and Myers Awards

were given in 1998, and since then the endowments have grown to over \$4M. Cumulative distributions have topped \$1M. Up to this point, 100% of every donation has gone directly to the Foundation's purposes (SIOP has covered the overhead). Another moon shot.

At present the Foundation trustees are working toward another major transition—greatly expanding grants available for I-O R&D, both in terms of numbers and size.

To this end much has happened and is happening:

- We clarified our mission: Connecting Donors with I-O Psychology Professionals to Create Smarter Workplaces.
- We are building a new website to better tell the stories of award and scholarship winners and grant recipients.
- We taped Tom Bouchard's Dunnette Prize invited address at the Chicago SIOP Conference, "*Finding Out How Things Work.*" It debuted on YouTube on Aug. 22, 2018, where it continues to be available: [View the video here](#).
- The Awards Strategy Task Force reported its recommendations to the SIOP Executive Board and to the SIOP Foundation Board just last month. Many recommendations pertaining to creating, publicizing, and presenting of awards have been implemented.
- In February 2019 we are running a pilot Horizon Forum, a small group meeting to help shape I-O research and development by highlighting emerging questions: What's on your horizon and keeps you awake at night?
- We have applied for Guide Star certification to demonstrate full transparency in managing our affairs, a step that is important in making the SIOP Foundation visible to the general public and especially to corporate and private foundations.
- We are introducing the Visionary Circle, a venture to build a renewable and continuing source of funding for I-O research and development. Here is version 1.0 of the key initiative: Soon we will recruit 100 donors to contribute \$1,000 to the SIOP Foundation, thereby providing a \$100,000 grant to the winner of the 2020 Visionary Grant competition. A committee will select the finalists. Four finalists will present their proposals during the SIOP Conference in Austin, and the winner will be announced at the closing plenary.
- We expect to learn quite a lot from version 1.0, all of it going into version 2.0 as needed. Surely there are more than 100 people who are visionaries about our applied science. We need a sea change for SIOP and our applied organizational science.

Will all this add up to another major transition for I-O psychology?

Just after the end of World War II, visionary leaders of medicine, biology, and chemistry got together and laid the groundwork for rapid advancement in the field now known as microbiology. The structure of DNA was discovered, and all of us are beneficiaries.

Rapid advancement in I-O psychology and the organizational sciences now is surely needed. The mania about big data and AI systems is at flood tide, with no shortage of need for critical and clear thinking about creating smarter workplaces. We think that the time is right. Let us know what you think.

Milt Hakel, President, mhakel@bgsu.edu
Rich Klimoski, Vice-President, rklimosk@gmu.edu
Nancy Tippins, Secretary, Nancy.Tippins@tippinsgroup.com
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John C Scott, Trustee, JScott@APTMetrics.com

SIOP 2019—Washington DC
34th Annual Conference: National Harbor, Fort Washington, Maryland, April 4-6, 2019
Preconference Workshops April 3, 2019

Tracey Rizzuto
Program Chair, SIOP 2019, Louisiana State University

Scott Tonidandel
Conference Chair, SIOP 2019, University of North Carolina at Charlotte

The 34th Annual SIOP Conference program promises to engage and energize all audiences! SIOP President **Talya Bauer's** "I Am SIOP" theme will highlight collaborations, demonstrate impact through partnerships, and feature multidisciplinary approaches to advance our science and practice, with several new features and an outstanding lineup of speakers.

Special thanks are in order to the Call for Proposals Committee Chair, **Wendy Bedwell**, and her team, **Shanique Brown** and **Keaton Fletcher**, for their work to encourage the out-pouring of high-quality sessions submission. Don't forget to submit your session by 5 p.m. (EST) September 12, and start making plans for the 2019 SIOP Conference at National Harbor in Fort Washington, Maryland just south of Washington, DC. Book your flights into Reagan National to come join us for another exciting conference.

As SIOP moves forward, take a fascinating glimpse at SIOP past. HUGE appreciation to SIOP Financial Officer **Evan Sinar**, and SIOP Member **Andrea Valentine** for generously sharing their time and talents in the relaunch of Program Explorer! Peruse SIOP sessions from 2008 through 2018 to track down past conference presentations and contribute to the cumulative knowledge-building essential to our field. This is a tremendous! The site is available at the permalink <https://tiny.cc/SIOPprogram> (best viewed with Chrome).

Now, here is what is in store for SIOP 2019!

Thursday Theme Track

This year's theme track will focus on science-practice partnerships with an emphasis on effectively translating and communicating results. Under the direction of SIOP Theme Track Chair, **Elizabeth McCune**, and Theme Track committee composed of **Madhura Chakrabarti**, **Molly Delaney**, **Chloe Lemelle**, **Ketaki Sodhi**, and Yujie (Jessie) Zhan, a full-day immersive experience will deliver compelling content via innovative session formats and high audience engagement. The goal of the 2019 Theme Track is to improve literacy around effective communication and translation of results for both academics and practitioners. Thursday, April 4, will start with a session focused on real-world examples of effective translations that will help ground the audience in what success can look like in this space. A midday session will focus on creating effective partnerships between academics and practitioners and ways to incorporate science-practice translation into I-O education. Another of the midday sessions will focus on how to translate complex analyses in order to influence high impact business decisions. A unique midday session will also focused on how both academics and practitioners can leverage design thinking to improve the relevance and application of research. Finally, the day will be capped with an inspiring session focused on the future of science—practice partnerships.

Special Events

This year we are excited to feature several special events throughout the conference, architected by Special Sessions Chair **Katina Sawyer**, and committee composed of **Christian Thoroughgood**, **Tyree Mitchell**, **Chloe Lemelle**, and **Alexander Schwall**. SIOP 2019's Special Sessions will build on last year's momentum around machine learning and expand our thinking about ways this innovative technique can contribute to our science and practice. It will also engage a lively discussion around politics in the workplace. Some companies have taken a stance on political issues and others have stayed out of it. How are companies and employees managing their

political identities inside and outside of the workplace? How do workplace politics affect broader perceptions of diversity and inclusion within organizations? These and many other questions will be explored.

The third Special Session will tackle the perils of oddball interview questions. For example, what's more powerful, a horse-sized duck or duck-sized horses? It is common for companies to ask job-irrelevant questions with the hope that they are assessing critical or creative thinking skills. What are the legal implications and what are applicant reactions? Researchers and practitioners will discuss the dangers and merits of using such questions.

The next session will ponder why good people do bad things. We have seen the headlines with Wells Fargo, Uber, and so on, and it can boil down to individuals making bad decisions or other individuals following along with these decisions. This session will explore what happens when unethical behaviors happen and how best to prevent them. The final Special Session is entitled, Too Legit to Quit or Pay to Quit. Companies like Zappos and Amazon are now paying employees to quit. What are the challenges of carrying out this type of policy, and what companies will follow suit? Don't miss out on answers to these intriguing questions!

Friday Seminars

Friday Seminars offer a unique educational opportunity within the main part of the conference. Friday Seminars Chair, **Meghan Thornton-Lugo**, and committee members, **Jeffrey Jolton**, **Eccho Yu**, **Ho Kwan Cheung**, **David Geller**, and **Michael Hoffman** are building a program of 3-hour sessions (the only extended-length sessions in the program) that will take place on Friday, April 5. These sessions provide a rich immersion experience for attendees on timely, cutting-edge content areas presented by true content experts. A sample of seminar topics slated for SIOP 2019 include Applied Research/Experimental Design in Natural Corporate Settings; Data Visualization; Exploring the Intersection of I-O and Data Security; Machine Learning; Text Analytics in Organizational Research; and Legal, Practical, and Fairness Concerns Around Social Media Policies.

Each session is shaped around learning objectives in order to ensure that professional developmental goals are met. Please note that Friday Seminars require advance registration and an additional fee. Space is limited so please sign up early!

Featured Posters

We will once again showcase the top rated posters at an evening all-conference reception. Come view some of the best submissions to the conference while enjoying drinks in a relaxed atmosphere with the presenters. If you've never been to this event, make 2019 the year you check it out!

Communities of Interest

Are you interested in an "open space" SIOP format that is attendee driven, informal, and focused on a topic of particular interest to you? The Communities of Interest format will allow you to meet new people, catch up with colleagues, learn about new advances, discuss ideas, have a provocative discussion, and play a part in driving breakthrough research and practice ideas on a hot topic at the forefront of I-O psychology. Communities of Interest Chair **Dustin Jundt** and his committee comprised of **Katharine O'Brien**, **Jason Randall**, **Erin Richard**, and Eileen Toomey have developed sessions designed to enhance existing communities and create new ones around common themes or interests. Communities of Interest have no chair, presenters, discussant, or even slides. Instead, they are discussions shaped on the basis of the audience and informally moderated by one or two facilitators with insights on a topic of interest. These are great sessions to attend if you would like to meet potential collaborators, generate ideas, have stimulating conversations, meet some new friends with common interests, or expand your network to include other like-minded SIOP members.

Continuing Education Credits

The annual conference offers many opportunities for attendees to earn continuing education credits, whether for psychology licensure, HR certifications, or other purposes. Information about the many ways to earn CE credit at the SIOP annual conference can be found at <http://www.siop.org/ce> and will be continually updated as more information becomes available.

Closing Plenary and Reception

Your Conference Committee is in the process of finalizing our closing plenary speaker. We will follow the closing plenary with our closing reception. The conference committee invites you to join us on Saturday evening at a themed closing reception that will be filled with music, dance, and delicious food.

The Conference Hotel

The Gaylord National, set on the banks of the beautiful Potomac River, offers an array of attractions and spacious accommodations for our conference. Located just south of Washington DC in Fort Washington, Maryland, the hotel is a short 15 minute drive from Reagan National Airport and offers a range of dining and entertainment on site. Please see the SIOP web page for details on booking your room and taking full advantage of all the SIOP conference has to offer.

Reviewers: Your Help Is Needed!

Don't forget to sign up to serve as a SIOP Conference Reviewer. Reviews are quick and aligned to your reported areas of expertise. New this year, once the reviews are in, you will be able to view others' reviews for the sessions you review. Please click here to complete the reviewer signup process: <http://my.siop.org/Meetings/Reviewer-Signup>

First time reviewers and experienced reviewers alike can benefit from Reviewer Development. Please check-out the terrific Introductory Reviewer Development Workshop sponsored by SIOP and the Consortium for the Advancement of Research Methods and Analysis (CARMA), which is available for free to all interested SIOP members. Workshop resources can be found here: <http://carmamep.org/siop-carma-reviewer-series/>

There is much anticipation for SIOP 2019. We hope we've sparked your excitement the conference. We can't wait to see you there!

Announcing the SIOP 2019 Preconference Workshops

Gavan O'Shea
HumRRO

Save the date! Wednesday, April 3, 2019, is the day that the SIOP preconference workshops will be held at the Gaylord National Harbor just down the Potomac River from Washington, DC. Gain hands-on experience with cutting edge I-O topics from the field's leading experts, network with your colleagues, and socialize at our premier evening reception! We'll also be offering a flexible half-day attendance option again this year.

The Workshop Committee has identified a diverse selection of innovative and timely topics to offer this year as well as a spectacular set of experts to lead these workshops. The lineup includes:

- **Diversity, Inclusion, and Equity in the Modern Workplace.** Derek Avery, Wake Forest University; Veronica Gilrane, Google

- **New Approaches to Prehire Assessment: Promises Versus Practicality.** Ben Hawkes, Shell International; Christina Norris-Watts, Johnson & Johnson
- **The Science and Practice of Mindfulness in the Workplace.** Andy Lee, Aetna; Darren Good, Pepperdine University; Chris Lyddy, Providence College
- **Validation 201: Refresh, Extend, and Update Your Validation Toolbox.** S. Morton McPhail; Frederick Oswald, Rice University; Nancy Tippins, The Nancy T. Tippins Group
- **Employee Experience: What's All the Buzz About?** Greg Stevens, Globoforce; Benjamin Granger, Qualtrics
- **Structured Employment Interviewing: The Philosophy, the Art, and the Engineering.** Michael Campion, Purdue University; Paul Green, Consultant/Speaker; Gary Latham, University of Toronto
- **Talent Analytics: Data-Driven Solutions to Problems That Matter.** Alexis Fink, Intel Corporation; Wayne Cascio, University of Colorado Denver
- **Legal Update: Contemporary EEO Developments That I-Os Need to Know.** Eric Dunleavy, DCI Consulting; Emilee Tison, DCI Consulting
- **Leading and Leveraging Virtual Teams for Global Business and Innovation.** Lucy Gilson, University of Connecticut; John Cocco, Henkel
- **Delivering Business Results: I-O Meets Change Management.** Linda Hoopes, Resilience Alliance; La-Shonda Oglesbee, Assurant
- **Systems Thinking, Organizational Diagnosis, and Design: Putting I-O Problems in Context.** Alan Colquitt and Alec Levenson, Center for Effective Organizations, Marshall School of Business, University of Southern California

Please look for the more detailed workshop descriptions in the preconference announcement and on the SIOP website when conference registration opens.

The 2018–2019 Workshop Committee consists of:

Gavan O'Shea, HumRRO (Committee Chair)
Rob Michel, Edison Electric Institute (EEI) (Chair-in-Training)
Ramzi Baydoun, Abbott Labs
Melissa Harrell, Google
Jaron Holmes, OPM
Kelsey Kline, Intel Corporation
Megan Leasher, Macy's, Inc.
Don Lustenberger, DDI
Christopher Rosett, Comcast Cable
Veronica Schmidt Harvey, Schmidt Harvey Consulting
Carra Sims, Rand Corporation
Neha Singla, Visa
Steve Stark, University of South Florida (USF)

Check Out the New Getting I-O Into Intro Textbooks Blog

One of the initiatives of **Talya Bauer's** new SIOP presidency is to include I-O psychology into Intro Psych Textbooks. Currently, very few Intro Psych textbooks include the topic, which contributes to a general lack of awareness of our field by many. Therefore, the Getting I-O into Intro Textbooks (*GIT* SIOP) Task Force was created. In an effort to keep the SIOP community updated on the task force's progress, the following blog has been created:

<http://my.siop.org/GIT-Blog>

Chaired by **Joe Allen** (University of Nebraska Omaha), members of the task force include **Georgia Chao** (Michigan State University), **Jen Gibson** (Fors Marsh Group), **Deborah DiazGranados** (Virginia Commonwealth University), **Roni Reiter-Palmon** (University of Nebraska Omaha), **Nick Salter** (Ramapo College of New Jersey), and **Marissa Leigh Shuffler Porter** (Clemson University).

The formal charge of this task force (written by Talya Bauer) is as follows:

The overarching task force goal is to increase the awareness and inclusion of IO psychology within General/Introduction to Psychology textbooks. This will take the form discussing, tracking, identifying, and addressing key issues related to IO content being included or not included in General/Introduction to Psychology textbooks.

While it is anticipated that the timeframe for documenting progress on the goal of more General/Introduction to Psychology textbooks is a long-term process and that major movement is expected to see dividends after 5+ years, the task force will spend two years (2018-2019 and 2019-2020) working toward implementing the identification and influence tactics while reporting to the Executive Board regularly.

This blog will regularly post on the updates of this task force, so please be sure to check back often! We want this blog to be a place where everyone in the SIOP community can check-in and see what we are up to—as well as give any ideas or suggestions you might have. The task force will be tackling this issue from multiple angles and considering both short- and long-term goals.

Some of the things we will be working on include:

- Discussions with APA leadership
- Discussions with and presentations at APA Division 2 and the National Institute on the Teaching of Psychology (NITOP)
- Identify, target, and track I-O content by authors of Intro to Psychology textbooks
- Identify and target textbook publishers of Intro Psychology textbooks
- Create and share I-O content (such as textbook content and I-O fact sheets)
- Create AP Psychology guest speaker volunteer opportunity
- Publicize AP psychology exam I-O content
- Create an Intro Psychology guest speaker volunteer opportunity

If you have any questions, ideas, thoughts, or suggestions, please feel free to contact anyone from the task force! This blog is maintained by Nick Salter nsalter@ramapo.edu.

Obituary: Nancy L. Rotchford

Nancy Rotchford died at her home in Hidden Meadows, San Diego County, CA on August 6, 2018, after a long battle with early onset Alzheimer's disease. Nancy attended high school in Ballard, WA, graduating in 1966. After attending community college in San Francisco, CA, she graduated from the University of California–Berkeley. She earned her PhD in Industrial and Organizational Psychology from the University of Illinois in Champagne-Urbana in 1982.

Nancy began her professional career at the Bank of America in San Francisco, CA. She later worked for Boeing and Microsoft in Seattle, WA, and Ingram Micro in Santa Ana, CA. After leaving Ingram Micro, she was an independent consultant. Known for her expertise in survey research, Nancy chaired the Mayflower Group from 1986-1987. She is survived by her life partner, Michael Franklin, her brothers, nephews, niece, and numerous friends, who fondly remember her good humor and laughter.

Members in the Media

Mariah Clawson

Awareness of I-O psychology has been on the rise thanks to articles written and featuring our SIOP members. These are member media mentions found from June 1, 2018 through August 31, 2018.

We scan the media on a regular basis but sometimes articles fall through our net. If we've missed your or a colleague's media mention, please [send them to us!](#) We push them on our social media and share them in this column, which you can use to find potential collaborators, spark ideas for research, and keep up with your fellow I-O practitioners.

Gender & Diversity Issues

Ronald Riggio discusses the differences between [men and women conversations and friendships](#).

A study coauthored by **Kathryne Dupre** found women who experience rudeness and incivility in the workplace are [more likely to be strict with their children at home](#).

Popular Press Topics

Ben Baran [says learning to listen to others and to ask questions](#) is crucial to avoiding embarrassing behaviors.

Elliot Lason [discusses social media use in the workplace](#).

[Are comedians master psychologists?](#) **Adam Grant** discusses with Malcom Gladwell.

Alicia Grandey suggests [using a rule set](#) that is not too firm but not too relaxed.

Steve Kozlowski says [conscientiousness can veer toward passivity](#).

[Speaking in person or on the phone](#) makes it easier to communicate feelings and ensure that messages are received as intended says **Amy Cooper Hakim**.

Paul Levy views [baseball clubhouses](#) as unlike any other workplace in the world.

Elliot Lason says there are several reasons why [fewer kids work the kind of summer jobs their parents used to have](#).

[Enthusiastic optimists](#) may make for great colleagues, but they may not make the best employees says Adam Grant.

Ekta Vyas discusses [the challenges she faced](#) during the major hospital expansion of the new Lucile Packard Children's Hospital Stanford.

Adam Grant lists three factors you should keep in mind [when choosing a teacher](#).

Employee Management, Motivation, and Turnover

An employer is [more likely to agree to give a raise](#) to someone who brings in clients and business says Amy Cooper Hakim.

Piers Steel discusses how [a person with innate talents and a person who is a hard worker](#) overcome challenges.

Why do [narcissists get promoted instead of honest employees](#)? **Klaus J. Templer** explores the reasons.

John Boudreau, Alan Colquitt, Ed Lawler, Cheryl Paullin, Elaine Pulakos, Denise Rousseau, and Sara Rynes contribute to an article discussing evidence on [how to get the best out of workers](#) and how businesses often choose to ignore the evidence.

Alicia Grandey discusses [emotional labor](#) and how valuable it is to employers and employees.

Paul Baard examines several [myths often attached to motivation issues](#).

Employee Burnout, Work-Life Balance

Workaholics can help themselves by [communicating with their supervisor](#) about when they are available and when they are off the clock, says **Malissa Clark**.

[“How to Be Happier at Work,”](#) features **Youngah Park, Emily Hunter, and Hannes Zacher**.

Adam Grant says people who are robbed of their freedom at work are more inclined to [expect total obedience at home from their children](#).

Leadership, Management, and Organizational Culture

Kurt Kraiger encourages employees to develop greater comfort in [their relationships with their boss](#) in order to get honest feedback.

Fred Oswald and Nathan Mondragon discuss [machine learning and algorithms](#) being used in the hiring process.

Educating employees by making them read books or take classes is [not an effective way to learn skills](#) and the employees will forget quickly, says **Martin Lanik**.

Steve Weingarden says it's essential that [new CEOs](#) master coaching, culture, and self-awareness.

[Reading body language](#) can be difficult. Ronald Riggio shares some tips.

Tomas Chamorro-Premuzic argues that [the practice of job interviews is outdated and unnecessary](#).

Elliot Lason [discusses the job interview](#) from both interviewer and interviewee perspectives.

How difficult can it be for organizations to [change their culture](#)? **Jaclyn Jensen** explains.

Adam Grant explains how to [give feedback](#) so people hear you're trying to help.

Evan Sinar discusses key questions about the [true role of a leader](#) in the age of the algorithm.

Membership Milestones

Jayne Tegge

Members are the heart and soul of SIOP and are greatly appreciated for their interest and contributions. An impressive list of distinguished members has been with the Society for 25 years or more. To recognize the contributions and loyalty of these dedicated members, SIOP has developed an initiative called the Sterling Circle. Sterling Circle members are honored in several ways and can be identified at SIOP events with a special ribbon on their badges. Learn more about the Sterling Circle here.

New Professional Members

George Alliger	Marianne Ernesto	Andrew Solomonson
William Beusse	Lawrence Hanser	Carol Surface
Warren Bobrow	Laura Heft	Kecia Thomas
Scott Bryant	Herbert Heneman	Richard Thompson
Linda Carr	Karl Kuhnert	Paul Van Katwyk
J. Rick Day	Mark LoVerde	Sharon Wagner
Robert Eichinger	Kenneth Siegel	

The life blood of any organization lies in attracting new members who bring a special enthusiasm and interest. Membership in SIOP is growing, and we take great pleasure in welcoming our newest members. They comprise a wonderful mix of former Student Affiliates upgrading to full membership and professionals, including those who previously were Associate members and International Affiliates. SIOP looks forward to these new members' participation on committees and conferences as they experience the value of membership in the premier organization for industrial and organizational psychologists.

New Professional Members

Cory Adis	Erika Brooks	Helen Chung
Paul Agnello	Laura Bryant	Matthan Churchill
Dawn Allen	Katrina Burch	Fernando Cifuentes
Stephanie Andel	Darren Bush	Iulia Cioca
Nancy Arduengo	Alan Cabanilla	Traci Cipriano
Nicholas Arreola	Anna Cale	Sarah Claiborne
Olabisi Atoba	Daniela Calefato-Greenblatt	David Colarossi
Sheryl Axline	Rachel Callan	Catherine Collins
Nicholas Baldwin	Lizbeth Camacho	Olivia Cooper
Grant Batchelor	Caitlin Carney	Brian Costello
Ashley Beaudoin	Joseph Carpini	Jonathan Cottrell
Lauren Bell	Patricia Cashat	Jessica Craig
Teresa Bennett	Lauren Catenacci-Francois	Denise Craven
James Bernthal	Mark Cawman	Shanna Daniels
Sarena Bhatia	Vivian Chan	Naveen Dass
Jordan Blackhurst	Christie Charles	Perry Daughtry
Michael Blair	Deepshikha Chatterjee	Kimberly Davies-Schrils
Leah Bressler	Chao-chuan Chen	Suzanne Dean

Shelley Delano Parker
Thulani DeMarsay
Mary Dolar
Searra Donnelly
Janet Donnelly
Brock Dubbels
Mariya Dubrovina
Alexandra Dunn
Jasmine Duran
Christine Dye
Rebecca Early
Takasha Edmond
Michelle Elam

Matthew Grossman
Melissa Gutworth
Rebecca Hagen
Russell Hall
William Haller
Leah Halper
Charlsa Hanna
Rachel Hardy
Gregory Harms
Felecia Harris-McCray
Dale Hayden
Gerard Hodgkinson
Kari Hoepner

Katherine Kearns
Anna Keil
Elisabeth Kelbley
Clinton Kelly
Joongseo Kim
Danielle King
Lauren Kiproff
Elyssa Klett
Eric Klingemier
David Kloak
Jared Klotz
David Kraichy
Kate Kramer

Reginald Ronald Shepps, PhD, Organizational Psychologist/Experiential Learning professional

I joined SIOP in 1968--since then, I have worked as a researcher, consultant/practitioner, and college professor.. SIOP has always provided me with a means of keeping up contact with my fellow professionals. Too, it is a kind of compass for me for professional/ethical issues and standards of practice. Finally, I have always been inspired by my SIOP colleagues, and appreciative of the deep friendships that have arisen with some of these fine professionals over the years. One memory particularly stands out - hearing that SIOP's voting about a possible name change had been tallied and realizing that 2 of the 5 votes by which SIOP **kept** its name came from the two people (including me) sitting in a single small office within the Wayne State University campus complex...realizing that at SIOP my vote really counted!

Rick Fenwick
Ricky Fenwick
Kristie Fierro
Keaton Fletcher
Caitlyn Foley
Jennifer Fowler
Kimberly French
Amy Frost
Vanessa Gallo
Kaylah Galloway
Sargam Garg
Sean Gasperson
Anthony Gatling
Eleni Georganta
Kamalika Ghosh
Daniel Githang'a
Stephanie Glassburn
Jeffrey Godbout
Kaci Grant
Sertrice Grice
Mark Grichanik
Matt Griffin

Ernest Hoffman
Nicole Howland
Serena Hsia
Terryel Hu
Amy Huber
Anna Hulett
Donald Humpert
Dennis Humphrey
Christine Hurst
Dorothy Infante
Nahren Ishaya
Kismet Jackson
Caitlin Jacobson
Bradley Jayne
Jessica Jenkins
India Johnson
Lars Johnson
Michael Johnson-Hales
Rajesh Kadam
Linda Karanja
Kristy Kay
Katherine Kay

A. LaMountain
Gale LaRoche
Stacy-Ann Larkin
Sunhee Lee
Catherine Leighton
Karen Leonard
Sijia Li
John-Gabriel Licht
Andreas Lohff
Aniko Lorincz
Eva Lovelace
Kristy Lustig
Scott Lyons
Jessica Macera
Dan Maday
Andrew Martins
Simone Mathieu
Matt Matsui
Victoria Mattingly
Laura McAliley
Nicholas McAuliffe
Conor McCarthy

Mallory McCord
Danielle McGill
Miranda McGinnis
Tristan McIntosh
Rehana Meghani
Diana Mekarski
Kimberley Mendelsohn
Keaton Montgomery
Christopher Morgan
Tyler Mulhearn
Quyen Nguyen
Scott Nyegaard
Faith Ochsner
Deena Oden
Yael Oelbaum
Idowu Ogunkuade
Neal Outland
Christine Overfors
Olalekan Oyeside
Nathan Page
Amanda Palmer
Jung Park
Ashlyn Patterson
Elizabeth Patterson
Geraldine Paul
Kortney Peagram
Jessica Pence
Andrew Pepper
Chris Pfund
Michael Phillips
Connor Pichette
Martha Picinich
Steven Prescott
Achim Preuss
Daniel Prouty
Justin Purl
Laura Quinn
Alison Rada-Bayne
Raya Rahbari
Shan Ran
Georgina Randsley de Moura
Arthur Reese

Robert Reimer
Jess Reliford
Amy Renshaw
Roman Rheingans-Carrion
Marie-Line Rigaud
Melissa Robertson
Margaret Roche
Justine Rockwood
Susana Rodriguez
Christopher Roman
JJ Roomsburg
Scott Ryan
Mariana Saintive Sousa
Trista Scherpenberg
David Schilling
Charles Schmitt
Allison Screen
Sade Sebro McGuire
Daniel Seto
Yashna Shah
Agnieszka Shepard
Wayne Shepard
Robert Simmons
Mathias Simmons
Ruchi Sinha
Kinsey Smith
Rachel Smith
Afonso Sousa
Stacy Starkka
Marion Stattler
Gabriella Steele
Stephen Steiner
Mark Stewart
Linda Stolp-Matanic
Tyler Stout
Sarah Strahan
Rebecca Tanner
Ellen Taverner
Choon Teck Kenneth Tan
Brian Tate
Elizabeth Teagarden
Stephen Teo

Kati Thomas
Kali Thompson
Jermani Thompson
Isaac Thompson
Aron Thune
Gary Thurgood
Alexandra Tolentino
Trey Trainum
Ege Turen
Joseph Tweeddale
Emily Tyrrell
Lalitha Urs
Kristen Voetmann
Lotta Wallin
Chasie Wallis
Pamela Waltz
Michael Ward
Enrique Washington
Stephanie Weddington
Alexis Wegman
Breanna Wexler
Jordan Whittenburg
Margi Williams
Susan Williams-Moore
Michael Wilmot
Ian Wilson
Jodi Wilson
Jocelyn Wiltshire
Shannel Winslow
John Wittgenstein
Stacey Wood
Hayden Woodley
Benjamin Wretling
Xiaozhen Wu
Shi Xu
Rachel Yates
Julie Yoon
Lingtao Yu
Martin Yu
Keith Zabel

And special congratulations to these three dedicated members who upgraded from Associate Member!

Christine Boyce

Keith Leas

Jessica Merten